



Digitized by the Internet Archive
in 2011 with funding from
University of Toronto



Gov. Doc
Ont.
M

Ontario, Min. Sept
Annual report

General Index

of the

Reports of the Bureau of Mines

Ontario

Volumes I to XVI

(1891-1907)

Compiled by Frank J. Nicolas.

Printed by Order of the Legislative Assembly of Ontario



101987
26/5/10

TORONTO :

Printed and Published by L. K. CAMERON, Printer to the King's Most Excellent Majesty
1909

WARWICK BROS' & RUTTER, Limited, Printers,
TORONTO.

INTRODUCTORY LETTER

*To the Honourable F. COCHRANE,
Minister of Lands, Forests and Mines.*

SIR,—The need for a consolidated or General Index of the Reports of the Bureau of Mines has been apparent for some time, and is being more and more felt as the reports increase in number. The Bureau's annual volumes, beginning with its establishment in 1891, have chronicled the progress of the mining industry in Ontario: have recorded the discovery and development of the mineral fields which have successively claimed attention; have embodied the results obtained by competent investigators into the geology and mineralogy of the newer and less-known portions of the Province, and have, from year to year, endeavoured to correlate the mineral arts of Ontario with the steady advances everywhere being made in knowledge and in practice.

It has been the aim of the Bureau to carry on its work in such a way as to fulfil the object for which it was created, which, in the language of the Statute of 1891,* is "to aid in promoting the mining interests of the Province."

Necessarily, the methods adopted by the Bureau to this end have been both varied and practical in their nature. Working out the geology and defining the limits of mineral-bearing districts; ascertaining the extent and characteristics of the formations found to carry ores or mineral substances of any useful kind, and describing them so as to enable men unskilled in technical terms, as well as trained geologists, to recognize them in the field; collecting statistics of output and value of the mineral production; investigating problems of treatment and the possibility of utilizing neglected or waste materials; these and similar means have been employed as occasion called for, in the hope of obtaining results that would subserve the mineral industries of the Province and be of use to the prospector, the miner, and the investor. But no hard and fast line can be drawn between the "practical" and the "scientific." The practical is but the scientific put into use, and it often happens that knowledge won for its own sake, without hope or expectation of reward, and which does not appear to have any immediate economic bearing, proves sooner or later to be intrinsically utilitarian.

Accordingly, the Bureau has believed it advisable not to neglect certain of its functions, which may perhaps be regarded as less severely practical than those already mentioned. The geology of a great part of Ontario, for instance, is of pre-Cambrian age. Fossiliferous evidence being absent, and lithological characteristics often of uncertain interpretation, the determination and classification of the various formations and the ascertaining of their relationships to one another present many difficulties. Yet the successful decipherment of the geological record may shed much light upon questions arising in the actual exploitation of mineral deposits, and may provide or suggest a solution of problems often perplexing to the mining engineer. An instance in point is afforded by the Cobalt mining district. The interpretation of the geological phenomena of that region by Professor W. G. Miller, the Provincial Geologist, and his assistant, Mr. Cyril W. Knight, during the short period of the field season of 1904, involving, as it did, a revision of the work and conclusions of previous observers in districts containing the same rocks, provided a basis for working the deposits of that unique field which has proven of the utmost service in actual

*54 Vict., chap. 8, sec. 9.

practice. Nor is it upon such occasions only that geology comes to the aid of industry. It has happened more than once that a geologist, intent only upon observing and correlating the rock formations of the district under his examination, and paying little or no regard to economic minerals or their indications, has produced a report and map which later have served as an invaluable guide to prospectors in the same field, upon valuable minerals being discovered therein.

"Knowledge," says Dr. Johnson, "is of two kinds. We know a subject ourselves, or we know where we can find information upon it." The reports of the Bureau, containing, as they do, a fairly complete record of the Province's mineral industry since they began to be published, as well as a large amount of information concerning the geology and mineral resources of the Province, are naturally in constant demand by those who are interested in particular minerals, deposits, or districts, in the possible and actual resources of the Province or any part of it, in the origin and progress of any branch of the mining industry, or in any other of the thousand and one features with which the reports must necessarily deal. To know where such information can be obtained when wanted is the really important thing, for no one memory can be trusted to contain and reproduce correctly such a mass of detail.

The General Index submitted herewith covers the Report of the Royal Commission on the Mineral Resources of Ontario, published in 1890, the first sixteen annual Reports of the Bureau of Mines, beginning with 1891 and ending with 1907, and several bulletins on special topics published by the Bureau at various times. The Report of the Royal Commission, though published before the Bureau of Mines was established, naturally claims a place in the Index, since it comprehends most of the information of a similar character available at the time it was printed, as well as much valuable historical data. It was upon the recommendation of the Commission that the Bureau was created.

From the First up to and including the Seventh of the Bureau's reports, namely, from 1891 to 1897, the volumes bear on the title page the year to which the Report particularly applies, and for which the statistics of output, etc., are given. A change was made in 1898 which caused the reports to bear the year in which they were actually printed. The Report for 1897 has "1898" on the title-page, but "1897" on the cover of the cloth-bound copies. The next, or Eighth Report, being for the year 1898, is marked "1889" both on title-page and cover, and this practice has been followed since that time. The change has led to some confusion in referring to the reports, and in citing them it is better to do so by the number of the volume than by the year. Thus the Report carrying on the cover the date "1896" is the Sixth Report, but the volume with the date "1904" is the Thirteenth, not the Fourteenth. Each volume is provided with an Index as well as a Table of Contents, and in this way the possessor of a set of the Bureau's Reports is able, by searching, to ascertain what of interest or value they contain on any given mineral, locality, or topic. Such information may be fragmentary and incomplete, or it may be full and definite, exactly what the inquirer is looking for; or it may give some clue or hint by means of which further and more complete data may be obtained from other sources. But the sixteen indexes to the sixteen Reports necessitate sixteen separate searches in order to locate everything that may be in all the Reports on any given subject, and time is money in this busy age. All the references to the subject in the whole sixteen volumes are now brought together in the General Index, and in one search instead of sixteen the inquirer can complete his quest.

Nor are convenience and the saving of time the only advantages which the General Index possesses over the indexes to the individual volumes. The separate indexes are not the work of one hand, nor are they compiled on a common plan. Hence they differ in perspective and detail, and to some extent are of unequal value. To be able to make a good index of a volume dealing in technical terms and with special branches of knowledge, presumes an extensive and accurate acquaintance, both with the

terminology and the subject matter of the volume. If this is absent the sense of proportion is wanting, important matters are apt to be slighted and trifling ones given too much space. The General Index, being the work of one man only, and being compiled, not from the indexes of the separate volumes, but from the text of the Reports themselves, is uniform in plan throughout, and is made with an adequate knowledge of geology, mineralogy, palæontology, metallurgy, mining and the other sciences and subjects which form the bulk of the matter contained in the several Reports. In some measure it is more than an index; it is a summary of the information which the Reports comprise, and will, it is hoped, by making the results obtained by the Bureau more accessible, render them more useful.

It will probably be found that the Index contains mistakes. The reports themselves are not free from mistakes. Errors creep in through defects of memory, manuscript and proof-reading. Statements accepted in good faith at second-hand, when traced to their original source, are found to have been incorrectly quoted or condensed, and errors of fact occasionally occur for which reasonable explanation is wanting. Even broken or imperfect type or incorrect spelling may lead to inaccuracy of statement. Machine-set type is prolific of inaccuracies, since the correction of one printer's error, especially if the number of lines be increased or diminished, may necessitate the re-setting of a whole paragraph, in which fresh errors may be made, requiring fresh corrections.

The Bureau's Reports have one and all been prepared, edited and proof-read, with much care, and the number of errors, small and great, is probably not in excess of what would be found in any other sixteen volumes of similar character. Wherever possible, errors in orthography or nomenclature have been corrected in the Index. If mistakes are detected in the Index itself, the Bureau will be glad to be notified of them, so that they may be rectified in any subsequent edition.

The earlier volumes of the Bureau are entirely out of print, and indeed this is the case with many of the later volumes as well. The only report of which any considerable number of copies remains on hand is the Tenth, printed in 1901. An extra edition was published for distribution at the Pan-American Exposition, held at Buffalo, N.Y., in that year, of which some hundreds are still left.

The Bureau has from the beginning supplied its Reports to a considerable number of public and educational institutions, such as universities, technical colleges, engineering societies, etc., not only in Canada, but also in the United States and Great Britain, so that full sets of its volumes may be consulted in many, if not all, of the leading cities and centres of the mining industry in these countries. To all such copies of the General Index will be sent. It is no longer possible to supply full, or even reasonably complete sets of the reports, but the Bureau will be glad to fill up gaps in public and private libraries to the extent of its ability.

Owing to the fact of the earlier volumes being difficult to procure, the Index has been made more complete than would otherwise have been deemed necessary, in the hope that the information supplied may, in many cases, be a useful substitute for that contained in the volumes themselves.

The edition of the General Index is limited to one thousand copies, all bound in linen cloth.

It only remains to say that the author of the Index, Mr. Frank J. Nicolas, of Ottawa, has performed his task with rare assiduity, diligence and success. His qualifications for the work have proven all that could be desired.

Your obedient servant,

THOS. W. GIBSON,

Deputy Minister of Mines.

Office of the Bureau of Mines,
Toronto, 26 January, 1909.



CONTENTS

OF THE

REPORTS OF THE BUREAU OF MINES

Volumes 1 to XVI (1891-1907)

Vol. I, 1891

| | PAGE. |
|---|---------|
| Letter of Transmission. By Archibald Blue | 1 |
| Report of the Bureau of Mines. By Archibald Blue | 3-48 |
| Artesian Wells. By Thos. W. Gibson | 49-62 |
| The Laurentian and Huronian Systems north of Lake Huron. By Dr. Robert Bell | 63-94 |
| Structural Materials. By Archibald Blue | 95-114 |
| Natural Gas. By Archibald Blue | 115-164 |
| The Minerals of Ontario. By Archibald Blue | 165-179 |
| Peat, Its Use and Value for Fuel. By Thos. W. Gibson | 180-211 |
| Technical Instruction. By Thos. W. Gibson | 212-217 |
| Alexander Murray, F.G.S., F.R.S.C., C.M.G. By Robert Bell | 218-222 |
| Report of the Inspector of Mines. By A. Slaght | 223-247 |

Vol. II, 1892

| | |
|--|---------|
| Letter of Transmission. By Archibald Blue | 3 |
| Report of the Bureau of Mines. By Archibald Blue | 5-12 |
| Iron-making in Ontario. By Archibald Blue | 13-30 |
| The Iron Ores of Ontario. By Archibald Blue | 31-82 |
| Treating Iron Ores and Metallic Iron. By Archibald Blue | 83-96 |
| Facts and Opinions on the Iron Industry. By Archibald Blue | 97-122 |
| Locations for Pig Iron Production. By John Birkinbine | 123-128 |
| Nickel and Copper. By Archibald Blue | 129-148 |
| The Metallurgy of Nickel (Translation). By Mons. David Levat | 149-162 |
| Constitution of Nickelferous Pyrrhotite. By Dr. Stephen H. Emmens..... | 163-166 |
| Some New Nickel Minerals. By Dr. Stephen H. Emmens | 167-170 |
| A Pioneer's Mining Experiences on Lake Superior and Lake Huron. By Walter William Palmer | 171-178 |
| New Sources of Platinum. By Dr. Stephen H. Emmens | 179-180 |
| Lithographic Stone. By Dr. C. W. Volney | 181-184 |
| Ontario's Minerals at the World's Fair. By Dr. A. P. Coleman | 185-194 |
| The Utilization of Peat:— | |
| The Peat Industry in Canada. By R. W. Ells | 195-202 |
| Peat as a Fuel. By Thomas W. Gibson | 203-210 |
| Peat in Europe To-Day. By Thomas W. Gibson | 211-220 |
| The Mining Laws of Ontario. By Archibald Blue | 221-229 |
| Report of The Inspector of Mines. By A. Slaght | 231-254 |
| Special Report on the Accident at the Blezard Mine. By A. Slaght | 255-257 |

Vol. III, 1893

| | |
|--|---------|
| Letter of Transmission. By Archibald Blue | 3-4 |
| Report of the Bureau of Mines. By Archibald Blue | 5-10 |
| The Gold Fields of Ontario. By Archibald Blue | 11-61 |
| Copper at Point Mamainse. By Archibald Blue | 62-88 |
| Actinolite, Asbestos and Talc. By Archibald Blue | 89-102 |
| Vitrified Brick for Street Pavements. By Thos. W. Gibson | 103-132 |
| Rocks and Building Stone. By Dr. A. P. Coleman | 133-136 |

| | |
|--|---------|
| Lithographic Stone. By Archibald Blue | 137-138 |
| Moss Litter. By Edward Jack | 139-144 |
| Iron Trade of the United States. By Archibald Blue | 145-146 |
| Nickel Steel for Armor. By Archibald Blue | 147-163 |
| Diamond Drills. By Archibald Blue | 164-166 |
| Mining Accidents. By Thos. W. Gibson | 167-177 |
| Kingston School of Mining. By Archibald Blue | 178-180 |
| Report of the Inspector of Mines. By A. Slaght | 181-199 |

Vol. IV, 1894

| | |
|--|---------|
| Letter of Transmission. By Archibald Blue | 3-5 |
| General Introduction. By Archibald Blue | 7-34 |
| Gold in Ontario: Its Associated Rocks and Minerals. By Dr. A. P. Coleman. | 35-100 |
| The Hinterland of Ontario. By Thos. W. Gibson | 101-138 |
| Calcium Carbide and Acetylene Gas. Introduction by Archibald Blue | 139-141 |
| The Commercial Synthesis of Illuminating Hydro-Carbons. By Prof. Vivian B. Lewes | 142-151 |
| The Carbides and Acetylene Commercially Considered. By T. L. Willson and J. Suckert | 152-166 |
| Diamond Drill Explorations. By Archibald Blue | 167-176 |
| Nickel and Its Uses. Introduction by Archibald Blue | 177-181 |
| Nickel and Nickel Steel. By Francis L. Sperry | 182-194 |
| Nickel Steel: Its Special Value for Armor. By Capt. W. H. Jaques | 194-198 |
| Mining Accidents. By Thos. W. Gibson | 199-215 |
| Summer Mining Schools. By Archibald Blue | 216-222 |
| Fifth Report of the Inspector of Mines. By A. Slaght | 223-253 |
| Maps Accompanying the Report: | |
| (1) Map of Southeastern Part of Rainy River District exhibiting the coun- try in the vicinity of Rainy Lake and River Seine, Scale 2 miles=1 inch. | |
| (2) Map of Part of Rainy River District, exhibiting the country in the vicinity of Manitou, Eagle and Wabigoon Lakes, Scale 2 miles=1 inch. | |

Vol. V, 1895

| | |
|---|---------|
| Letter of Transmission. By Archibald Blue | 3-6 |
| General Introduction. By Archibald Blue | 7-46 |
| Second Report on the Gold Fields of Western Ontario. By Dr. A. P. Coleman. | 47-106 |
| A Tour of Inspection in Northwestern Ontario. By Archibald Blue | 107-190 |
| The New Ontario. By Archibald Blue | 191-211 |
| The Mining Schools. By Archibald Blue | 212-220 |
| Work with the Diamond Drill. By Thos. W. Gibson | 221-234 |
| Mining Accidents. By Thos. W. Gibson | 235-240 |
| Report on a Section of the Height of Land Region Northeast of Lake Superior. By E. B. Borron | 241-258 |
| Sixth Report of the Inspector of Mines. By A. Slaght | 259-287 |

Vol. VI, 1896

| | |
|---|---------|
| Letter of Transmission. By Archibald Blue | 3-6 |
| General Introduction. By Archibald Blue | 7-70 |
| Third Report on the West Ontario Gold Region. By Dr. A. P. Coleman..... | 71-124 |
| The Story of Silver Islet. By Archibald Blue | 125-158 |
| Anthraxolite or Anthracitic Carbon. By Dr. Arthur P. Coleman | 159-161 |
| Chemical Composition of the Anthraxolite. By W. Hodgson Ellis | 162-166 |
| Geology of the Nipissing-Algoma Line. By Edward M. Burwash..... | 167-184 |
| Moss Litter. By Thos. W. Gibson | 185-192 |
| Mining Schools in Ontario. By Archibald Blue | 193-198 |
| Mineral Collections for Summer Mining Schools. Introduction by A. Blue ... | 199-200 |
| Part I. Minerals. By W. G. Miller | 200-205 |
| Part II. Catalogue of Minerals in the Collection. By Prof. W. L. Goodwin | 206-229 |
| Part III. Rocks and Rock Structures. By W. G. Miller | 229-236 |
| Some Notes on the Milling of Gold Ores. By John E. Hardman | 237-243 |
| Seventh Report of the Inspector of Mines. By A. Slaght | 245-281 |

Maps:

- Map of Nipissing-Algoma line, after page 176.
 Geological and topographical map of the Northern part of the Lake of the Woods and Adjacent Country in the Rainy River District.
 Geological and topographical map of part of the Thunder Bay District from Thunder Bay to the Western side of Moss township, including Dog Lake, Lake Shebandowan and Lac des Mille Lacs.

Vol. VII, 1897

Part I

| | |
|--|---------|
| Prefatory Note. By Archibald Blue | ix-x |
| Report of the Bureau of Mines: Introduction. By Archibald Blue | 1-6 |
| Statistics of Mining Lands and Minerals. By Archibald Blue | 7-34 |
| Mines of Northwestern Ontario. By James A. Bow | 35-84 |
| Mines of Eastern Ontario. By Aaron Slaght | 85-100 |
| Michipicoton Mining Division. By David G. Boyd | 101-106 |

Part II

| | |
|---|---------|
| Fourth Report on the West Ontario Gold Region. By Dr. A. P. Coleman... | 109-145 |
| Notes on the Petrology of Ontario. By Dr. A. P. Coleman | 145-150 |
| Clastic Huronian Rocks of Western Ontario. By Dr. A. P. Coleman | 151-160 |
| Geology of Base and Meridian Lines in Rainy River District. By William Arthur Parks | 161-183 |
| Michipicoton Mining Division. By Arthur B. Willmott | 184-206 |

Part III

| | |
|--|---------|
| Economic Geology of Eastern Ontario: | |
| Corundum and other Minerals. By Willet G. Miller | 207-238 |
| Analyses of Corundum and Corundum-bearing Rock. By W. L. Goodwin | 238-239 |
| The Concentration of Corundum. By Courtenay De Kalh | 240-250 |
| Water Powers of Ontario. By Thomas W. Gibson | 251-256 |
| Placer Gold in Vermilion River. By Arthur H. Gracey | 256-259 |
| Mining Schools and Classes: | |
| Kingston School of Mining. By W. L. Goodwin | 259-263 |
| School of Practical Science. By J. Watson Bain | 263-265 |

Maps:

- Map of Base and Meridian lines in the Rainy River District, after page 172.
 Map of part of the Michipicoton Mining Division, after page 188.
 Map of parts of the counties of Hastings and Renfrew, after page 206.
 Plan showing gold-bearing sands on Vermilion River, after page 236.

Vol. VIII, 1899

Part I

| | |
|---|---------|
| Prefatory Note. By A. Blue | ix |
| Introduction. By A. Blue | 5-8 |
| Mineral Industries of Ontario. By A. Blue | 9-28 |
| The Condition of Ontario Mines. By Courtenay De Kalh | 29-48 |
| Mines of Northwestern Ontario. By James A. Bow | 49-99 |
| Michipicoton Mining Division. By David G. Boyd | 100-105 |
| Nickel Extraction by the Mond Process. By Sir William Chandler Roberts-Austen | 106-120 |

Part II

| | |
|--|---------|
| Copper Regions of the Upper Lakes. By Dr. A. P. Coleman | 121-174 |
| The Nipissing-Algoma Boundary. By William Arthur Parks | 175-196 |
| Goulais River to Dalton. By W. A. Charlton, Jr. | 197-204 |
| Corundum and other Minerals. By Willet G. Miller | 205-240 |
| Corundum in Ontario. By Archibald Blue | 241-249 |
| Cerundiferous Nepheline Syenite. By Dr. A. P. Coleman | 250-253 |
| Michipicoton Iron Range. By A. P. Coleman and A. B. Willmott | 254-258 |
| Copper in Parry Sound District. By Dr. A. P. Coleman | 259-262 |

| | |
|--|---------|
| Lower Seine Gold Mines. By James A. Bow | 263-274 |
| Notes on Working Mines. By J. Watson Bain | 275-279 |
| Summer Mining Classes. By J. Watson Bain and W. L. Goodwin | 280-283 |
| Provincial Assay Office. By J. Walter Wells | 284-289 |

Maps:

- Map of Mining Claims in vicinity of Wawa Lake, after page 120.
- Map of the Western Part of Michipicoton Mining Division, after page 126.
- Map of Abitibi River and The Nipissing-Algonia Line, after page 200.

Vol. IX, 1900

| | |
|--|---------|
| Introduction. By Archibald Blue | 5-8 |
| Mineral Industries of Ontario. By Archibald Blue | 9-34 |
| Mines of Northwestern Ontario. By James A. Bow | 35-88 |
| Mines of Eastern Ontario. By Courtenay De Kalb | 89-111 |
| Michipicoton Mining Division. By D. G. Boyd | 112-118 |
| Are there Diamonds in Ontario? By Archibald Blue | 119-124 |
| Niven's Base Line 1899. By William A. Parks | 125-142 |
| Copper and Iron Regions of Ontario. By Dr. A. P. Coleman | 143-191 |
| Minerals of Ontario with Notes. By Willet G. Miller | 192-212 |
| A Sketch of the Nickel Industry. By J. W. Bain | 213-224 |
| The Mines Law of Ontario. By Archibald Blue | 225-229 |

Maps:

- Map of parts of the Districts of Algoma and Nipissing, showing the Upper Basins of the Moose, Ottawa and Michipicoton Rivers.
- Map of Sudbury Mining District, showing location of Mines and Mining Properties.

Vol. X, 1901

| | |
|---|---------|
| Introductory Letter. By Thos. W. Gibson | 5-8 |
| Statistics for 1900. By Thos. W. Gibson | 9-60 |
| Metallurgical Industries at Sault Ste. Marie. By Frank N. Speller | 61-68 |
| Mines of Northwest Ontario: Part I. By J. A. Bow | 69-90 |
| Mines of Northwest Ontario: Part II. By W. E. H. Carter | 90-112 |
| Mines of Eastern Ontario. By C. De Kalb | 113-136 |
| Michipicoton Mining Division. By D. G. Boyd | 137-144 |
| Mining Land Agencies. By Thos. W. Gibson | 145-148 |
| Provincial Assay Office, Belleville. By J. Walter Wells | 148-150 |
| The Vermilion River Placers. By A. P. Coleman | 151-159 |
| Iron Ores of Nipissing District. By Willet G. Miller | 160-180 |
| Iron Ranges of the Lower Huronian. By A. P. Coleman | 181-212 |
| The Iron Belt on Lake Nipigon. By J. W. Bain | 212-214 |
| Sea Beaches of Eastern Ontario. By A. P. Coleman | 215-227 |

Maps:

- Map of part of the District of Nipissing to accompany Report by W. G. Miller on the Iron Ores of Nipissing, Scale 4 miles to 1 inch.

Vol. XI, 1902

| | |
|---|---------|
| Introductory Letter. By Thos. W. Gibson | 3-8 |
| Statistics for 1901. By Thos. W. Gibson | 9-60 |
| Summer Mining Schools. By W. L. Goodwin | 61-69 |
| Michipicoton Mining Division. By D. G. Boyd | 70-75 |
| Provincial Assay Office. By J. Walter Wells | 76-79 |
| Mining Land Agencies. By Thos. W. Gibson | 80-82 |
| Ontario at the Pan-American. By Frank N. Speller | 83-90 |
| The Mineral Industries of Sault Ste. Marie. By A. B. Willmott | 91-100 |
| Arsenic in Ontario. By J. Walter Wells | 101-122 |
| The Corniferous Exposure in Anderdon. By Rev. Thos. Nattress | 123-127 |
| Iron Ranges of Northwestern Ontario. By A. P. Coleman | 128-151 |
| The Michipicoton Iron Region. By A. P. Coleman and A. B. Willmott | 152-185 |
| The Eastern Ontario Gold Belt. By Willet G. Miller | 186-207 |
| Syenites near Port Coldwell. By A. P. Coleman | 208-213 |
| Lake Temiscaming to the Height of Land. By Willet G. Miller | 214-230 |
| The Mines of Ontario. By W. E. H. Carter | 231-298 |

Maps:

- (1) Geological map of the Michipicoton Iron Range. By A. P. Coleman and A. B. Willmott, Scale 40 chains=1 inch.
- (2) Map of the Helen Iron Mine. By A. B. Willmott, Scale 300 feet to 1 inch.
- (3) Outline map of the Eastern Ontario Gold Belt to accompany Report of W. G. Miller, Scale 4 miles to 1 inch.

Vol. XII, 1903

| | |
|--|---------|
| Introductory Letter. By Thos. W. Gibson | 3-6 |
| Statistics for 1902. By Thos. W. Gibson | 7-53 |
| Summer Mining Schools. By W. L. Goodwin | 54-61 |
| Michipicoton Mining Division. By D. G. Boyd | 62-67 |
| Provincial Assay Office. By J. Walter Wells and A. G. Burrows..... | 68-72 |
| Mines of Northwestern Ontario. By Willet G. Miller | 73-107 |
| Mines of Eastern Ontario. By W. E. H. Carter | 108-140 |
| Fossiliferous Rocks of Southwest Ontario. By W. A. Parks | 141-156 |
| Up and Down the Mississaga. By L. C. Graton | 157-172 |
| Round Lake to Abitibi River. By L. L. Bolton | 173-190 |
| Peat Fuel: Its Manufacture and Use. By W. E. H. Carter | 191-234 |
| The Sudbury Nickel Deposits. By A. P. Coleman | 235-303 |
| Iron Ranges of Northern Ontario. By Willet G. Miller | 304-317 |
| Moose Mountain Iron Range. By C. K. Leith | 318-321 |
| Magnetic Concentration of Iron Ores. By J. Walter Wells | 322-342 |

Maps:

- (1) Geological map of Copper Cliff Mine and vicinity, by A. P. Coleman.
- (2) Geological map of Stobie and Frood Nickel Mines, by A. P. Coleman.

Vol. XIII, 1904**Part I**

| | |
|--|---------|
| Introductory Letter. By Thos. W. Gibson | x-xiii |
| Statistical Review. By Thos. W. Gibson | 1-45 |
| Michipicoton Mining Division. By D. G. Boyd | 46-49 |
| Provincial Assay Office. By A. G. Burrows | 50-51 |
| Summer Mining Schools. By W. L. Goodwin | 52-57 |
| Mines of Western Ontario. By W. E. H. Carter | 58-87 |
| Mines of Eastern Ontario. By Willet G. Miller | 88-95 |
| Cobalt-Nickel Arsenides and Silver. By Willet G. Miller | 96-103 |
| The Abitibi Region. By George F. Kay | 104-134 |
| Economic Resources of Moose River Basin. By James Mackintosh Bell..... | 135-179 |
| Devonian Fauna of Kwataboahagan River. By William Arthur Parks | 180-191 |
| The Northern Nickel Range. By A. P. Coleman | 192-222 |
| The Iron Belt West of Hutton. By M. T. Culbert | 222-224 |
| The Iroquois Beach in Ontario. By A. P. Coleman | 225-244 |

Maps:

- (1) Map of Northern Nickel Range, by A. P. Coleman, Scale 2 miles to 1 inch.
- (2) Map of Northern Parts of the Districts of Algoma and Nipissing, to accompany Report of J. M. Bell, Scale 8 miles to 1 inch.
- (3) Map of Lake Iroquois, by A. P. Coleman; Parts in New York after H. L. Fairchild.

Part II

| | |
|--|-------|
| Preface. By Willet G. Miller | v-vii |
| The Limestones of Ontario. By Willet G. Miller | 1-126 |

Vol. XIV, 1905**Part I**

| | |
|--|-------|
| Statistical Review. By Thos. W. Gibson | 1-36 |
| Summer Mining Classes. By W. L. Goodwin | 37-42 |
| Mines of Western Ontario. By W. E. H. Carter | 43-75 |
| Mines of Eastern Ontario. By E. T. Corkill | 76-88 |

| | |
|---|---------|
| Petroleum and Natural Gas. By E. T. Corkill | 89-117 |
| Cement Industry of Ontario. By P. Gillespie | 118-183 |
| Explorations in Abitibi. By James G. McMillan | 184-212 |
| Agricultural Resources of Abitibi. By Archibald Henderson | 213-253 |
| Loon Lake Iron-Bearing District. By W. N. Smith | 254-260 |
| Boston Township Iron Range. By Willet G. Miller | 261-268 |
| Pre-Cambrian Nomenclature. Report of International Committee on Lake Superior Geology | 269-277 |
| Iron Ranges of Michipicoten West. By J. M. Bell | 278-355 |
| Map of the Michipicoten Iron Range west of the Magpie River, to accompany Report by James Mackintosh Bell, geologically colored, scale 2 miles to 1 inch. | |

Part II

| | |
|---|------|
| The Cobalt-Nickel Arsenides and Silver Deposits of Temiskaming. By Willet G. Miller | 1-62 |
| Maps: | |
| (1) Geological Map of the Cobalt-Nickel-Arsenic-Silver area. | |
| (2) Sketch map showing location of veins in Coleman. | |

Part III

| | |
|--|-------|
| The Sudbury Nickel Field. By A. P. Coleman | 1-183 |
| Maps: | |
| (1) Geological Map of Sudbury Nickel Region, Scale 1½ miles to 1 inch. | |
| (2) Map of Copper Cliff Mine and vicinity. | |
| (3) Map of Stobie and Frood Nickel Mines. | |

Vol. XV, 1906

Part I

| | |
|--|---------|
| Statistical Review. By Thos. W. Gibson | 1-38 |
| Summer Mining Classes. By W. L. Goodwin | 39-46 |
| Mines of Ontario. By E. T. Corkill | 47-107 |
| Natural Gas and Petroleum. By Eugene Coste | 108-115 |
| Exploration in Mattagami Valley. By H. L. Kerr | 116-135 |
| Agricultural Resources of Mattagami. By Archibald Henderson | 136-155 |
| The Animikie Iron Range. By L. P. Silver | 156-172 |
| Iron Ranges of Eastern Michipicoten. By A. P. Coleman | 173-206 |
| Maps: | |
| (1) Map of the Animikie Iron Range near Port Arthur, Ontario, geologically colored. Scale 1 mile to 1 inch. To accompany Report by L. P. Silver. | |
| (2) Map of the Iron Ranges of Southeastern Michipicoten, geologically colored. Scale 2 miles to 1 inch. To accompany report by A. P. Coleman. | |

Part II

| | |
|---|-------|
| Preface. By Willet G. Miller | 1-2 |
| Clay and the Clay Industry of Ontario. By M. B. Baker | 3-120 |

Vol. XVI, 1907

Part I

| | |
|---|---------|
| Introductory Letter. By Thos. W. Gibson | 2 |
| Statistical Review. By Thos. W. Gibson | 3-48 |
| Summer Mining Classes. By W. L. Goodwin | 49-54 |
| Mines of Ontario. By E. T. Corkill | 55-91 |
| Oil and Gas in Kent. By C. W. Knight | 92-104 |
| I. Iron Ranges East of Lake Nipigon. By A. P. Coleman | 105-135 |
| II. Iron Ranges East of Lake Nipigon. By E. S. Moore | 136-148 |
| Iron Pyrites in Ontario. By E. L. Fraleek | 149-201 |
| The Larder Lake District. By R. W. Brock | 202-218 |
| Lake Abitibi Gold Deposits. By Willet G. Miller | 219-220 |
| Grenville-Hastings Unconformity. By Willet G. Miller and Cyril W. Knight. | 221-223 |

Map:

Geological sketch map, Larder Lake Region, Scale 1 mile to 1 inch, to accompany Report by R. W. Brock.

Part II

| | |
|--|---------|
| Preface. By Willet G. Miller | ix-xvi |
| The Cobalt-Nickel Arsenides and Silver Deposits of Temiskaming (Third Edition): | |
| Chap. I. Cobalt-Nickel Arsenides and Silver. By Willet G. Miller | 1-67 |
| Chap. II. The Working Mines of Cobalt. By E. T. Corkill | 68-116 |
| Chap. III. Other Temiskaming Cobalt Areas: | |
| Report on Montreal River and Temagami Forest Reserve. By Cyril W. Knight | 117-123 |
| Notes on the Bloom Lake Area. By W. R. Rogers | 129-130 |
| A Mineralized Area in the townships of Casey and Harris. By R. E. Hore. | 131-134 |
| A Part of the Area south of Lake Wendigo. By R. E. Hore | 135-137 |
| The Area west of Bay Lake on the Montreal River. By J. S. Delury... .. | 138-146 |
| Cobalt-Silver Veins south of the Township of Lorrain. By Cyril W. Knight .. | 147-149 |
| Chap. IV. Lake Superior Silver Deposits. By Willet G. Miller | 150-170 |
| Appendix I: List of Mining Companies incorporated in connection with Cobalt. By Willet G. Miller | 171-181 |
| Appendix II: The Early History of the Cobalt Industry in Saxony. Translated by G. R. Mickle | 182-199 |

Maps:

Geological map (colored) of part of the Cobalt area, scale 400 feet to one inch, with contour intervals of 10 feet.
 Geological map (colored) of Cobalt-Nickel-Arsenic-Silver area, near Lake Temiskaming, Ontario, scale one mile to one inch.
 Index map (uncolored) showing mining properties in Coleman.
 Plan (uncolored) of Bloom lake area.

BULLETINS

- No. I. The Gold Fields of Western Ontario, 1896. A preliminary report by Prof. A. P. Coleman, Ph.D.
 No. II. Anthracitic Carbon or Anthraxolite, 1896. By Prof. A. P. Coleman. Re-published under the title of "Anthraxolite or Anthracitic Carbon" in the Sixth Report.
 No. III. Michipicoton Mining Division, 1897. A Preliminary Report by Arthur B. Willmott, M.A., B.Sc. Re-published in Seventh Report, Part II.
 No. IV. Mineral Production of Ontario for 1901. By Thos. W. Gibson.
 No. V. Peat Fuel: Its Manufacture and Use, 1900. By W. E. H. Carter, B.A., Sc. Re-published in Twelfth Report.
 No. VI. Mineral Production of Ontario for 1903. By Thos. W. Gibson.
 A separate volume under the title "The Gold Fields of Ontario" was published in 1897. Its contents were "Second Report on the Gold Fields of Western Ontario," by Dr. A. P. Coleman, "A Tour of Inspection in Northwestern Ontario," by A. Blue, (both re-published from the Fifth Report of the Bureau), "The Gold Fields of Western Ontario," (being Bulletin No. 1), and a short general introduction, by Mr. Blue.

EXPLANATION OF INDEX

This Index includes references to the following publications :—

| Report of the Royal Commission on the Mineral Resources of Ontario, referred to as Reports of the Bureau of Mines : | | R. C. |
|--|-------------|-----------|
| Volume I, 1891..... | " | Vol. i |
| II, 1892..... | " | ii |
| III, 1893..... | " | iii |
| IV, 1894..... | " | iv |
| V, 1895..... | " | v |
| VI, 1896..... | " | vi |
| VII, 1897 ; parts i, ii and iii..... | " | vii |
| VIII, 1899..... | " | viii |
| IX, 1900..... | " | ix |
| X, 1901..... | " | x |
| XI, 1902..... | " | xi |
| XII, 1903..... | " | xii |
| XIII, 1904, part i..... | " | A xiii |
| " ii..... | " | B xiii |
| XIV, 1905, part i..... | " | A xiv |
| " ii..... | " | B xiv |
| " iii..... | " | C xiv |
| XV, 1906, part i..... | " | A xv |
| " ii..... | " | B xv |
| XVI, 1907, part i..... | " | A xvi |
| " ii, <i>See</i> Appendix. | | |
| Bulletin I. The Gold Fields of Western Ontario..... | " | Bull. i |
| II. Anthracitic Carbon or Anthraxolite..... | " | Bull. ii |
| III. Michipicoton Mining Division..... | " | Bull. iii |
| IV. Mineral Production of Ontario for 1901..... | Included in | Vol. xi |
| V. Peat Fuel : Its Manufacture and Use..... | " | xii |
| VI. Mineral Production of Ontario for 1903..... | " | xiii |

NOTES

All places referred to in this Index are in Ontario unless otherwise mentioned.

The rulings of the Geographic Board of Canada have been adopted for the orthography of all places in the Dominion.

For purposes of more exact reference certain areal names are used in the Index that are not the names of judicial or mining divisions, but refer to areas covered by published geological sheets. These are:

Manitou district, comprising that part of Rainy River district to the east of the Lake of the Woods and north of Rainy lake, extending from Hawk Lake Station to Taché station on the Canadian Pacific railway, and from the foot of Manitoulin lake to a few miles north of the railway.

Seine River district, comprising that part of Rainy River district lying to the north of Hunter island, and extending from the boundary of Thunder Bay district westerly nearly to Rainy lake.

Shebandowan district, comprising that part of Thunder Bay district lying between its western boundary and Thunder Bay and extending north and south between Carlstadt station and Port Arthur.

ABBREVIATIONS

Alg.—District of Algoma.

B.C.—Province of British Columbia.

C.P.R.—Canadian Pacific Railway.

G.T.R.—Grand Trunk Railway.

H.B.C.—Hudson's Bay Co.

Kee.—Provisional district of Keewatin.

Lab.—Labrador and the provisional district of Ungava.

Man.—Province of Manitoba.

N.B.—Province of New Brunswick.

N.S.—Province of Nova Scotia.

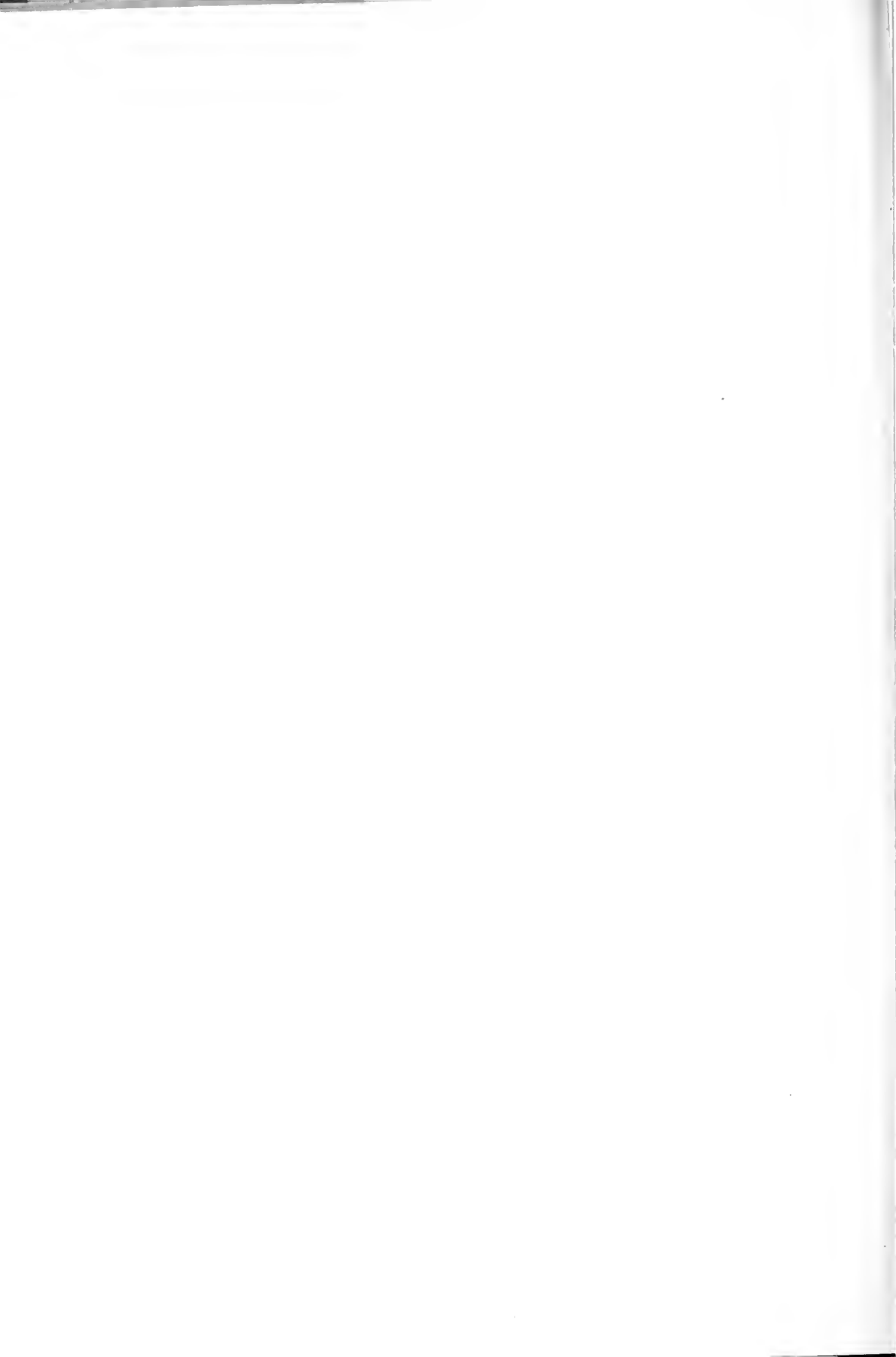
Nip.—District of Nipissing.

Ont.—Province of Ontario.

R.C.—Royal Commission on the Mineral Resources of Ontario.

R.R.d.—Rainy River district.

Th.B.d.—Thunder Bay district.



General Index

| | Page. | Vol. |
|--|----------|--------|
| A 3 silver location. See Three A mine. | | |
| A 257, 273=275 iron locations, RIDDELL SIDING, R. R. D. | | |
| Notes on, by Fraleck..... | 175, 176 | A xvi |
| A.A. Company | 23 | i |
| A.A. island, LARDER LAKE, NIP. . . | 213 | A xvi |
| Aachen, See Aix-la-Chapelle. | | |
| Aalborg Mosstroelsefabrik, DEN-MARK. | | |
| Peat manufacturing by..... | 211 | ii |
| Aaron, John D. | | |
| Manager, Long Lake gold mine. | 256 | xi |
| Route from Wabigoon lake to Minnitaki lake, described by. | 171, 172 | vii |
| Abbott and Harrison. | | |
| Dynamite manufactured by, Brockville tp..... | 152 | A xvi |
| Abel, Sir Frederick. | 96 | iii |
| John | | |
| Copper mining by, Michipicoten harbour..... | 115 | ix |
| | 140 | x |
| | 73 | xi |
| | 65 | xii |
| Aberdeen, SCOTLAND. | | |
| Building stone imported from... | 15 | A xiv |
| Brick Works. | | |
| Capital and date of charter..... | 25 | A xv |
| Works of, notes on..... | 106, 107 | B xv |
| Development Co. | | |
| Capital and date of charter..... | 24 | A xiii |
| (COFFIN) tp., ALG. | | |
| Copper in..... | 19 | viii |
| | 22 | xi |
| mining..... | 95 | ix |
| Iron ore in..... | 143 | R C |
| hematite..... | 199 | ix |
| mining..... | 64 | ii |
| notes by Coleman..... | 188, 189 | x |
| prospecting..... | 97 | vii |
| Rocks in..... | 39 | iii |
| Aberdour (or Aberthaw), FIFE CO., SCOTLAND. | | |
| Lime from, analysis..... | 107 | i |
| <i>Abies balsamea,</i> See Balsam. | | |
| Abigail, Francis | | |
| Evidence by, re royalties..... | 23, 24 | i |
| Abinger tp., ADDINGTON CO. | | |
| Mica in..... | 245 | i |
| | 220 | v |
| | 205 | xi |
| Ablno pt., BERTIE TP., WELLAND CO. | | |
| Gas at..... | 102, 104 | A xiv |
| analysis..... | 106 | ix |
| Onondaga formation at..... | 103 | A xiv |
| Section from, to St. Catharines.. | 103 | A xiv |
| Abitibi and Cobalt Manufacturing Co. | | |
| Capital and date of charter..... | 27 | A xiv |

| | Page. | Vol. |
|--|----------|--------|
| Abitibi branch, BLANCHE RIVER. See Blanche river, L. Timiskaming. | | |
| canyon, ABITIBI RIVER. | | |
| Description..... | 145 | A xiii |
| Rocks at..... | 143 | A xiii |
| dist., NIP. | | |
| Agricultural resources of: | | |
| report by Henderson..... | 213-245 | A xiv |
| Jarvis..... | 121-134 | A xiii |
| Explorations in: | | |
| report by Kay..... | 104-120 | A xiii |
| Kerr..... | 124-127 | A xv |
| McMillan..... | 184-212 | A xiv |
| lake, ONT. AND QUE. | | |
| Agricultural land near. See Abitibi dist. | | |
| Explorations northwest of, report by Workman..... | 250-253 | A xiv |
| Fort on, early French..... | 197 | v |
| Gold on..... | 55, 218 | A xvi |
| notes by Miller..... | 219, 220 | A xvi |
| Indian villages on, photo.... | 176, 177 | A xiii |
| Iron ore on..... | 23 | R C |
| magnetite..... | 317 | xii |
| Kaolinic clays on..... | 12 | A xiii |
| Pine on..... | 119 | iv |
| Rocks on and near: | | |
| chlorite schist..... | 211 | A xiv |
| Huronian..... | 124 | iv |
| quartzite..... | 18, 20 | R C |
| serpentine..... | 81 | i |
| | 82, 83 | B xiii |
| Wheat and vegetables grown on. | 50 | A xvi |
| Mg. and Development Co. | | |
| Capital and date of charter..... | 29 | A xvi |
| river, NIP. | | |
| Birds on..... | 253 | A xiv |
| Character of..... | 192 | viii |
| Clay belt on, width of..... | 175 | A xiii |
| Description, by McMillan.. | 185, 186 | A xiv |
| Falls on, photos..... | 200, 201 | viii |
| | 144, 145 | A xiii |
| at mouth, cause of..... | 147 | A xiii |
| Fire-clay on..... | 159 | A xiii |
| Fish in..... | 253 | A xiv |
| Fossils, <i>Aracula tertilio</i> | 188 | A xiii |
| Devonian..... | 142 | A xiii |
| Kaolin on..... | 4, 173 | i |
| Length of..... | 103 | ix |
| Lignite on..... | 70 | R C |
| | 178, 181 | i |
| | 203 | ii |
| | 125 | iv |
| | 128 | A xiii |
| analyses..... | 175 | A xiii |
| photos..... | 176, 177 | A xiii |
| report by J. M. Bell. | 169-174 | A xiii |
| Minor ref. to..... | 201 | v |
| Notes on, by Parks..... | 181-190 | viii |

| | Page. | Vol. | | Page. | Vol. |
|--|------------|------|--|-------------|------|
| Abitibi river, Nir.—<i>Con.</i> | | | Accidents.—<i>Con.</i> | | |
| Notes on, by Henderson, and photos..... | 229-234 A | xiv | Cobalt, dynamite magazine..... | 52 A | xvi |
| Rocks on and near: | | | Copper Bay mine..... | 91, 95 | ix |
| Carbonaceous shales..... | 159 A | xiii | Copper Cliff mine..... | 182 | iii |
| Devonian, photo..... | 160, 161 A | xiii | | 243, 244 | iv |
| gabbro, petrography..... | 140 A | xiii | | 68, 273 | vi |
| glacial age..... | 143 A | xiii | | 96 | vii |
| limestone, bituminous..... | 128 | iv | <i>See also</i> Inspector's reports below. | | |
| Corniferous..... | 17 | R C | Craigmont steamship engineer... 40 A | xv | |
| fossiliferous..... | 32 B | xiii | Evans mine, notes by Slaght.... | 185 | iii |
| notes by McMillan..... | 205, 206 A | xiv | Frenchmen rapid..... | 190 | vii |
| petrographical notes..... | 210-212 A | xiv | Hamilton furnace..... | 30 | iv |
| Route from, to Otto tp., rep. | | | Inspector's report on, 1892.. | 254-256 | ii |
| by Belton..... | 173-190 | xii | 1893.. | 167-177 | iii |
| Soil from..... | 130 A | xiii | 1894.. | 199-215 | iv |
| analysis..... | 244 A | xiv | 1895.. | 235-240 | v |
| Timbered land along..... | 235 A | xiv | 1896.. | 66-70 | vi |
| 146, 177 A | xiii | | 1897.. | 29-33 | vii |
| 200, 201, 228, 232, 233 A | xiv | | 1898.. | 23-28 | viii |
| Trading post on, early French.. | 196 | v | 1899.. | 25-32 | ix |
| Tributaries of..... | 199 A | xiv | 1900.. | 42-49 | x |
| notes by McMillan. 202, 203 A | xiv | | 1901.. | 48-57 | xi |
| Water power on..... | 252 | vii | 1902.. | 42-48 | xii |
| 193 | viii | | 1903.. | 38-41 A | xiii |
| 145 A | xiii | | 1904.. | 25-29 A | xiv |
| 208, 235 A | xiv | | 1905.. | 29-35 A | xv |
| | | | 1906.. | 32-35 A | xvi |
| Abraham. | | | Lake of the Woods, Bureau of | | |
| Journey by, on Euphrates, ref. to. | 166 | i | Mines party..... | 116 | vii |
| C. A. | 140 | iv | Madoe iron foundry..... | 324 | R C |
| Louis J. | 269 | xi | Merrittton, cyclone..... | 17 | viii |
| | 81 A | xiii | Michipicoten island, Indians | | |
| Robert | | | drowned off..... | 284 A | xiv |
| Fossil tracks found by, near Beau- | 40 | R C | Moira river, flood at Actinolite.. | 22 A | xiv |
| Abram falls, ABRAM LAKE, R. R. D. | | | Pinchin drowned..... | 58 A | xv |
| Boulders near, granite..... | 153 | vii | Pointe-aux-Mines, copper mining. | 93 | R C |
| Gold prospecting near..... | 178 | vii | Sault Ste. Marie, shooting rapids. | 109 | v |
| Photo of..... | 124, 125 | vii | Schneeberg, flood..... | 75 B | xiv |
| Rocks on and near..... | 168 | vii | Sudbury dist., cloudburst..... | 273 | vi |
| Lake, R. R. D. | | | due to blasting hot | | |
| Geology of neighbourhood..... | 59 | v | ore..... | 183 | iii |
| 167 | vii | | Sultana gold mine..... | 66, 67, 249 | vi |
| 88 | v | | <i>See also</i> Inspector's reports above. | | |
| Glacial striae near..... | 267 | vi | <i>Accipenser.</i> <i>See</i> Sturgeon. | | |
| Gold on and near, mining..... | 177 | vii | <i>Accipiter atricapillus.</i> <i>See</i> Goshawk, | | |
| prospecting.. | 165 | vii | American | | |
| Minor ref. to..... | 87 | v | <i>velox.</i> <i>See</i> Hawk, sharp | | |
| Schist on..... | 96 | v | skinned | | |
| conglomerate..... | 174, 181 | vii | <i>Acer.</i> <i>See</i> Maple. | | |
| Timber near..... | | | <i>dasycarpum.</i> <i>See</i> Maple, soft or | | |
| Abrasive materials. | | | silver | | |
| <i>See also</i> Cornulium, Emery, etc. | | | <i>pennsylvanicum.</i> <i>See</i> Maple, | | |
| List of..... | 216 | vii | mountain | | |
| Prices of, 1898..... | 237 | viii | <i>rubrum.</i> <i>See</i> Maple, red or | | |
| Abrey, G. R. | | | scarlet | | |
| Ref. to surveys by, Sturgeon lake | 38 | x | <i>saccharinum.</i> <i>See</i> Maple, soft | | |
| <i>Acanthis linaria.</i> <i>See</i> Redpoll. | | | or silver | | |
| Acanthite. | | | <i>saccharinum</i> (fossil). Ottawa, near..... | 225, | x |
| Joachimsthal, Bohemia..... | 61 B | xiv | <i>saccharum.</i> <i>See</i> Sugar, maple | | |
| Accidents. | | | <i>spicatum.</i> <i>See</i> Maple, mountain | | |
| <i>See also</i> Fires | | | Acetate of lime. | | |
| Abitibi river, Speight's party... 250 A | xiv | | As a by-product of charcoal burn- | | |
| "Arcadia" wrecked..... | 189 A | xv | ing..... | 394, 481 | R C |
| Black Donald graphite mine, | | | Lime used in manufacture of... 2, 3 B | xiii | |
| flooded..... | 12, 92 A | xiii | Acetic acid. | | |
| Bleazard mine, notes by Slaght | | | As a by-product of smelting.... | 391 | R C |
| 247, 255, 256 | ii | | Importation and price of..... | 481 | R C |
| Bruce mines, machine building.. 94 | R C | | | | |
| steamer sunk..... | 95 | R C | | | |

| | Page. | Vol. | | Page | Vol. |
|--|--------------|------|-----------------------------------|---------------|------|
| Acetic acid. — <i>Con.</i> | | | Actinolite. — <i>Con.</i> | | |
| Sulphuric acid in manufacture of, 193 A | xvi | | Actinolite — <i>Con.</i> | | |
| Acetylene gas. | | | mining, 1893..... | 91 | iii |
| See also Calcium carbide. | | | 1897..... | 98 | vii |
| Notes on, by Blue..... | 139-141 | iv | 1901..... | 204 | xi |
| Paper on..... | 32-41 | v | 1902..... | 56 | xii |
| | 27-32 | vi | | 92 A | xiii |
| | 20-22 | vii | stopped by accident to dam. | 87 A | xiv |
| by Lewes..... | 142-151 | iv | notes by Merritt..... | 79 | RC |
| Wilson & Suckert. 152-166 | iv | | mill in, description..... | 93 | iii |
| Use of, extending..... | 18 A | xiii | injured by flood..... | 22 A | xiv |
| Light, Heat and Power Co.... | 37 | v | uses of..... | 11 A | xiii |
| Lighting Co. of London.... | 20, 21 | vii | Cement making at..... | 87 | RC |
| Lighting Co. of St. Mary's.. | 20 | vii | Clay from, analysis..... | 18 B | xv |
| <i>Achillea millefolium.</i> | | | Marble at..... | 200 | xi |
| Abitibi Lake dist..... | 242 A | xiv | | 56 | xii |
| Mattagami valley..... | 151 A | xv | | 62 B | xiii |
| Achuter portage, MISSISSAUGA RIVER. | 195 | viii | analysis..... | 65, 66 B | xiii |
| Acme Color Works. | | | character..... | 69, 82 | RC |
| Arsenic manufactured by..... | 122 | xi | diagram of deposit..... | 76 | RC |
| Oil Co. | | | notes by Merritt..... | 75 | RC |
| Capital and date of charter..... | 31 A | xvi | Whitney..... | 80-82 | RC |
| Work by, in Kent co..... | 92 A | xvi | quarried..... | 204 | xi |
| <i>Aerophyllum onoidense.</i> | | | | 12, 64 B | xiii |
| Kwataboahagan river..... | 181 A | xiii | Mispickel at..... | 102 | xi |
| North Cayuga tp..... | 146 | xii | | 56 | xii |
| Port Colborne (near)..... | 35 | xi | arsenic making from..... | 288 | viii |
| <i>Actea spicata, var. rubra</i> | | | mining, notes by Miller..... | 200 | xi |
| Abitibi dist..... | 241 A | xiv | Acton, Admiral | 153 | iii |
| Mattagami valley..... | 150 A | xv | J. B..... | 174 | ii |
| Actinolite. | | | Acton, BAGOT CO., QUE. | | |
| Actinolite (Bridgewater)..... | 52 | RC | Anthraxolite in..... | 6 Bull | ii |
| notes by Merritt..... | 27, 204, 205 | xi | Lime-kilns in..... | 14 A | xiii |
| | 79 | RC | Acts of Parliament. | | |
| mining of..... | 91 | iii | British Columbia, Mining Act, | | |
| mill, description..... | 204 | xi | 1884..... | 273 | RC |
| Analysis..... | 93 | iii | Ceylon, ordinance No. 7, 1882.... | 43 | i |
| Exhibited at World's Fair..... | 192 | ix | Great Britain, Ashbourne Min- | | |
| Hardness of..... | 188 | ii | ing Act..... | 36, 37 | i |
| Hungerford tp..... | 202 | vi | Natal, Mining Act 34, of 1888.... | 43 | i |
| Larder lake..... | 52 | RC | New Zealand, Custom Duties | | |
| Madoc tp, associated with iron.. | 220 | xi | Act, 1882..... | 45 | i |
| Michigan, U. S., in Ishpeming | 37 | ii | Ontario: | | |
| formation..... | 151 | ix | See also Reports on Mining | | |
| Mineralogical report, 1897..... | 98 | vii | Laws..... | 256-307 | RC |
| Occurrences of..... | 192 | ix | | 221-229 | ii |
| | 27 | xi | For the encouragement of iron | | |
| Paper on, by Blue..... | 89-93 | iii | mining: | | |
| Specific gravity of..... | 202 | vi | notes on..... | 26, 27 | xi |
| Statistics of, 1901..... | 12, 13 | xi | ref. to..... | 15 | ix |
| 1902..... | 12, 13 | xii | See also Iron Mining Fund | | |
| 1902-4..... | 4 | xv | Mining Act, 1864..... | 265, 266, 272 | RC |
| | 6 A | xvi | 1865..... | 221, 222 | ii |
| 1903..... | 2 A | xiii | 1868..... | 268, 273 | RC |
| 1904..... | 1, 3, 22 A | xiv | 1869..... | 267 | RC |
| Sudbury occurrences..... | 163 C | xiv | 1890, notes by Blue, 7, 8 | i | |
| Clarabelle mine..... | 40 C | xiv | 1898..... | 240 | v |
| Evans mine..... | 292 | xii | | 7, 8 | viii |
| Frood mine..... | 57 C | xiv | 1906..... | 36 A | xvi |
| Worthington mine..... | 292 | xii | notes on, by Blue..... | 3 | vii |
| | 31 C | xiv | provisions of..... | 225, 226 | ix |
| Uses of..... | 87 | RC | Joint Stock Act, ref. to..... | 48 | i |
| | 26 | xi | Railway Land Subsidy Act..... | 241 | RC |
| | 11, 12 A | xiii | Re children in mines..... | 22 | iv |
| Actinolite (BRIDGEWATER), ELZEVR | | | Re corundiferous lands..... | 248, 249 | viii |
| TP., HASTINGS CO. | | | Re duties of coroners..... | 177 | iii |
| Actinolite in..... | 52, 86 | RC | Re nickel ores, refining of..... | 213 | ix |
| | 27 | xi | Re natural gas, quality of..... | 21 | vii |
| | | | tax on..... | 18 | x |
| | | | Re royalties, abandoned..... | 259 | RC |

| | Page. | Vol. | | Page. | Vol. |
|--|-----------|------|--|------------|------|
| Acts of Parliament.—<i>Can.</i> | | | Adams, R. | 222 | vii |
| Ontario.— <i>Can.</i> | | | R. N. | 272 | xi |
| <i>Re</i> water-powers..... | 253-256 | vii | | 99 | xii |
| To create a Bureau of Mines, | | | (<i>See also</i> Soo Prospecting and De- | | |
| <i>ref. to</i> | 4 | i | velopment Co. and Copper | | |
| To prevent blasting in hot ores. | 175 | iii | Queen Mg. Co.) | | |
| To provide for the purchase of | | | Robert | | |
| diamond-drills..... | 225 | v | Evidence by, before Royal | | |
| United States. <i>See</i> Sherman Act. | | | Com..... | 53, 175 | R C |
| Victoria, Aust., Mining Act, 1890 | 44 | i | W. | | |
| <i>See also</i> Mining laws, Royalties, | | | Mica mining by, in N. Burgess tp. | 131 | xii |
| <i>etc.</i> | | | | 85 A | xiii |
| AD2 gold mine. <i>See</i> Golden Crescent | | | W. H. | | |
| mine. | | | Data by <i>re</i> sulphuric acid.... | 193, 194 A | xvi |
| Gold Mining Co. | | | <i>Ref. to</i> work by, on pyrites in | | |
| Capital and date of charter..... | 7 | vii | Louisa co., Va..... | 172 A | xvi |
| <i>See also</i> Golden Crescent gold | | | W. N. | | |
| mine. | | | <i>Ref. to</i> paper by, on iron ore in | | |
| Ada G. gold mine, NEAR MOORE | | | U. S..... | 24 | ii |
| RAY, L. OF THE WOODS. | | | Adams Center, NEW YORK STATE. | | |
| Evidence <i>re</i> before Royal | | | Altitude of beach at..... | 234 A | xiii |
| Com..... | 116, 117 | R C | lake, N. BURGESS TP., LANARK | | |
| Minor <i>ref.</i> | 21 | iii | Co. | | |
| Adair, Charles | 166 | ix | Hematite in..... | 140 | R C |
| Robert | | | lake, R. R. D. | | |
| Accident to..... | 32 | ix | Quartz from, assay..... | 180 | vii |
| Adamant. | | | Adamson, Lawrence William | | |
| Mills, in Toronto, for making.... | 112 | i | Evidence by, <i>re</i> royalties in Great | | |
| Mfg. and Mg. Co., | | | Britain..... | 17 | i |
| Contract of, with Alabastine Co. | 279 | vi | William | | |
| Gypsum mining by, near Cayuga. | 241 | i | Brick yard of, at Walkerton, | | |
| Mine of, leased to Alabastine Co., | 197 | iii | <i>notes on</i> | 60 B | xv |
| Notes on, 1890..... | 111, 112 | i | Addington co. | | |
| Adamantine spar. <i>See</i> Corundum. | | | Apatite deposits in..... | 436 | R C |
| Adams, Charles | | | Celestite from, crystals of..... | 190 | ii |
| Killed, 1899..... | 28 | ix | Iron ores of, chromium in..... | 233 | vii |
| Dr. Frank D. | | | Mica in, white..... | 149 | R C |
| Analysis by, of dolomite from | | | Rocks in, classification by Vennor. | 43 | ii |
| Cobocconk..... | 114 B | xiii | limestone, <i>notes by</i> | | |
| Notes by, on nepheline-syenite.... | 245 | viii | Miller..... | 26 B | xiii |
| Photo of..... | 277 A | xiv | Topography of, character..... | 437 | R C |
| <i>Ref. to</i> notes by, on the Flow of | | | Adelaide tp., MIDDLESEX CO. | | |
| Marble..... | S R | xiii | Brickyard in. <i>See</i> Strathroy, and | | |
| <i>Ref. to</i> surveys by: | | | Kerwood. | | |
| Garden River region..... | 124 | viii | <i>Adiantum pedatum.</i> | | |
| Hastings dist..... | 218 | v | Abitibi Lake dist..... | 242 A | xiv |
| 208, 209, 227, 228 | | vii | Adirondack mountains, Vt. | | |
| 218, 244, 250 | | viii | Altitude of..... | 193 | v |
| 213 | | xi | Magnetite in..... | 476 | R C |
| Three Rivers dist., Que..... | 92 | iv | Adjuda Quarry Co. | 98 | i |
| | 99 | v | Adler, G. | 86 A | xv |
| | 159 | vii | Adlers Sons. | | |
| <i>Ref. to</i> work by, on Sudbury | | | Ar-enic manufactured by..... | 122 | xi |
| rocks..... | 3, 17 C | xiv | Admiralty, The <i>See</i> British Ad- | | |
| Report by, and others, on Pre- | | | miralty. | | |
| Cambrian nomenclature..... | 269-277 A | xiv | Ægirine. | | |
| Segregation theory of, for Sud- | | | Heron bay, L. Superior..... | 192 | ix |
| bury nickel deposits..... | 236, 278 | xii | Aerolites. | | |
| Views of, on Laurentian system. | 194 | v | Definition of..... | 528 | R C |
| James | 54 A | xiii | Africa. | | |
| James H. | 142 A | xiv | <i>See also</i> South Africa, <i>etc.</i> | | |
| John H. | | | Copper production, 1880-1887.... | 371 | R C |
| Acknowledgments to..... | 128 | xii | Smelting furnace in, early..... | 355 | R C |
| Mica works of, Perth..... | 291 | xi | Agalmatolite. | | |
| | 131 | xii | Laurentian and Silurian areas.... | 192 | ix |
| | 85 A | xiv | Agaskagon lake, NEITOGAMI RIVER, | | |
| | 106 A | xv | MOOSE RIVER. | | |
| L. | 110 | vi | Description of river near..... | 137 A | xii |
| Peter | 195 | iii | Notes on..... | 148 A | xii |

| | Page. | Vol. | | Page | Vol. |
|--|-------------|------|--|----------|------|
| Agassiz, Jean Louis Rodolphe | | | Agricultural land.—<i>Con.</i> | | |
| Description by, of shores of L. Superior..... | 200 | vii | Rainy River valley..... | 207 | R C |
| Ref. to work by, N. shore of L. Superior..... | 171-173 | ii | notes by Blue..... | 147 | xi |
| Superior..... | 136 | vi | Seine River dist..... | 67, 91 | v |
| Exploration and Mining Co. | | | Speight's meridian line, E. of L. Superior..... | 197-203 | viii |
| Capital and date of charter | 9 | ix | Sudbury dist..... | 241 | xii |
| lake (GLACIAL.) | | | 105 C | xiv | |
| Area of, various views..... | 91 | v | Northern nickel range..... | 137 | vii |
| Notes on, by Blue | 202 | v | 193 A | xiii | |
| Origin of | 222 | x | Sulphuric acid for..... | 107 A | xvi |
| Upham's work on, ref. to..... | 101 | xi | Timagami Lake dist..... | 56, 57 | R C |
| Agates | | | 161 | x | |
| Lake Superior | 61 | R C | Timiskaming lake..... | 118 | ix |
| Gargantua harbour | 132 | viii | 174 | iv | |
| Michipicoten island..... | 190, 193 | ii | Toronto, near. | 198 | v |
| 144 | viii | | Turtle River valley..... | 91 | v |
| Occurrences | 192, 193 | ix | Whitefish valley, Th. B. dist. | 206, 239 | R C |
| Agawa (AGUAWA) river, L. SUPERIOR. | | | <i>See also</i> Fertilizers, Soil, etc. | | |
| Description of, by Willmott | 131 | viii | implements. | | |
| Terraces at mouth of, level of... | 155 | viii | Statistics, 1881..... | 116 | ii |
| Agglomerate. | | | 1881-1887..... | 249 | R C |
| Michipicoten div., petrography. | 342 A | xiv | Agrimonia eupatoria. | | |
| Wabigoon Lake dist | 183 | vii | Abitibi Lake dist..... | 241 A | xiv |
| Agwiwa river. <i>See</i> Agawa river. | | | Agrippa. | | |
| Agricultural land. | | | Architecture by..... | 16 | iv |
| Abitibi dist., report by:— | | | Aguawa river. <i>See</i> Agawa river. | | |
| Henderson | 213-245 A | xiv | Agwasuk river, KWATABOANEGAN RIVER | 137 A | xiii |
| Jarvis | 121-134 A | xiii | Ahn, Robert H. | | |
| Abitibi valley..... | 192, 193 | viii | Experiments by, on placer deposits, Hammer township..... | 18 | xi |
| Agassiz lake, the cause of..... | 202 | v | Gold prospecting by:— | | |
| Agawa valley | 131 | viii | L. of the Woods dist. | 181, 185 | v |
| Atikokan iron range | 72 | ii | Vermilion river..... | 82 | xi |
| Blanche river..... | 215 | xi | Manager for:— | | |
| Brookville dist..... | 152 A | xvi | Crown Point gold mine..... | 59 | ix |
| Bruce Mines dist..... | 124 | viii | Baden-Powell gold mine..... | 93 | xii |
| Cobalt dist..... | 7, 32, 33 B | xiv | Dominion Gold Mg. and Reduction Works..... | 172-177 | v |
| Dunchurch and vicinity..... | 170 | ix | 50, 109, 251, 252 | vi | |
| Garden River, near..... | 197 | viii | Edna gold mine..... | 122 | vii |
| Hinterland, The, notes by Bell, Borron, Gibson, Fleming, etc. | 108-116 | iv | Elsie gold mine..... | 110 | vii |
| Iroquois beach..... | 237, 238 A | xiii | Gold Reefs Co..... | 59 | ix |
| Kaministiquia valley | 146 | xi | Golden Gate gold mine..... | 98 | vi |
| Korah tp..... | 149 | viii | Norman Reduction Works..... | 99 | viii |
| Kent co..... | 92, 102 A | xvi | 88 | ix | |
| McCann tp..... | 249, 253 A | xiv | Notes by, on Dominion Reduction Works | 259 | vi |
| Manitoba, how formed..... | 91 | v | Owner of Queen and Standard mines..... | 49, 50 | vi |
| Mattagami valley . 121, 122, 124, 127 A | xv | | Aiken, R. H. | | |
| Michipicoten div..... | 203 | viii | Analysis by, of ore from Strathcona nickel mine | 67 C | xiv |
| 296 A | xiv | | Assays by, of nickel ores..... | 199 A | xiii |
| Mississagi valley..... | 152 | viii | Aikman, David | | |
| Montreal river, mouth of | 177 | xi | Peat process of..... | 206 | ii |
| Night-hawk Lake dist..... | 117 | vi | notes..... | 199 | i |
| Nipigon Lake dist..... | 212 | x | ref. to..... | 201 | xii |
| Niven's base line and S. of..... | 142 | ix | quarry, NEAR YORK. | | |
| Occupation of, notes by Gibson. | 137 | iv | Gypsum of, notes on | 53 B | xiii |
| Opening up of certain, due to C. P. Ry..... | 103 | iv | Ainsworth, KOOTENAY LAKE, B.C. | | |
| Pigeon river, north of | 146 | ix | Calamine at..... | 210 | vi |
| Pishkanogama valley | 135 | ix | Air. | | |
| Porcupine Lake dist..... | 177 | viii | Composition of | 417 | R C |
| Rainy Lake dist..... | 65 | R C | Aitken, J. W. <i>See</i> Maple City Oil and Gas Co. | | |
| 44, 45, 72 | iv | | | | |
| Wabigoon region..... | 92 | v | | | |
| 171 | vii | | | | |
| 182 | vii | | | | |

| | Page. | Vol. |
|--|----------|------|
| Aitken, D. A. | 102 | vii |
| | 102 | viii |
| Aitkens, James | | |
| Accident to..... | 23 | viii |
| Alx-la-Chapelle, RHEINISH PRUSSIA. | | |
| Mining school at..... | 491, 513 | R C |
| Ajax Production Co. | | |
| Capital and date of charter..... | 26 A | xv |
| Ajibik quartzite. <i>See</i> Algonkian formation. | | |
| Akerman, Prof. Richard | | |
| Notes by, on Stockholm mining school..... | 513 | R C |
| Swedish pig-iron manufacture.... | 477 | R C |
| foundry, ESTOF, SWEDEN..... | 199 | xii |
| Akikenda falls, MISSISSAUGI RIVER, L. HURON. <i>See</i> Aubrey falls. | | |
| Akron, ERIE CO., N. Y. | | |
| Limestone at, analysis..... | 15, 16 B | xiii |
| Corniferous..... | 156 | i |
| Vitrified Press Brick Co. | | |
| Analysis of shale used by..... | 119 | iii |
| A L 61-65 gold locs., GOLD CREEK, MATAWIN RIVER | 82 | v |
| 74-76 gold locs. <i>See</i> Wiegand mine. | | |
| 104 gold loc., SHOAL LAKE, SEINE RIVER | 66, 159 | v |
| 110 gold loc. <i>See</i> Ferguson mine. | | |
| 111 gold loc. <i>See</i> Kelley location. | | |
| 113, 115 gold locs. <i>See</i> Isabella mine. | | |
| 114, 116 gold locs. <i>See</i> Golden Star mine. | | |
| 198 gold loc., ISLAND FALLS, SEINE RIVER. | | |
| Notes on, by Bow..... | 93, 91 | viii |
| 199 gold loc., RESERVE ISLAND, SEINE RIVER. | | |
| Notes on, by Coleman..... | 74 | vi |
| 200, 278 gold locs., ISLAND FALLS, SEINE RIVER. | | |
| Notes on, 1903..... | 71, 72 A | xiii |
| 1904..... | 57 A | xiv |
| Afterwards, Minto mine, <i>which see.</i> | | |
| 206 gold loc. <i>See</i> Little Master mine. | | |
| 207, 208 gold locs., near MUD LAKE, R. R. D. | 68 A | xiii |
| 216, 217 gold locs. <i>See</i> Otisse Mining Co. | | |
| 219, 220 gold locs. <i>See</i> Ursa Major mine. | | |
| 282 gold loc. <i>See</i> Sunbeam mine. | | |
| 283 gold loc. <i>See</i> Railroader's Gold Mfg. Co. | | |
| 298, 299 gold locs. <i>See</i> Roy Gold Mfg. Co. | | |
| 303 gold loc. <i>See</i> Duluth Mining Co. | | |
| 325 gold loc. <i>See</i> Jack Lake mine. | | |
| 383 iron loc. <i>See</i> Argenteuil Mining Co. | | |

| | Page. | Vol. |
|--|-----------------|------|
| A L 384-401 iron locs., E. of L. NIPIGON. | | |
| Notes on, by Coleman... 125, 126, 132 A | xvi | |
| 402, 403 iron locs., N. of STURGEON RIVER, L. NIPIGON | 117, 118 A | xvi |
| 404 to 408 iron locs., N. of STURGEON RIVER, L. NIPIGON. | | |
| Notes on, by Coleman..... | 115, 117 A | xvi |
| Rocks on, eruptive..... | 129 A | xvi |
| 412 iron loc., SAND CREEK, L. NIPIGON. | | |
| Notes on, by Coleman..... | 122 A | xvi |
| 413, 414 iron locs., near POPLAR LODGE, L. NIPIGON. | | |
| Rocks of, conglomerate..... | 112 A | xvi |
| iron formation 119-122, 126 A | xvi | |
| petrography..... | 132 A | xvi |
| photo..... | 120 A | xvi |
| 416 iron loc., near L. Eva, near L. NIPIGON. | | |
| Diamond drilling in..... | 120 A | xvi |
| Rocks in..... | 121, 132 A | xvi |
| 418-420 iron locs., N. of STURGEON RIVER, L. NIPIGON. | | |
| Conglomerate in..... | 112, 117, 118 A | xvi |
| 461, 462 iron locs., near STEEP-ROCK LAKE. | | |
| Iron pyrites in..... | 173 A | xvi |
| 521, iron loc., ANIMIKIE RANGE, TH. B. D. | 161 A | xv |
| Alabama, U. S. | | |
| Iron industry in, 1891..... | 127 | ii |
| ore in, cost of producing... 10 | i | |
| | 400 | R C |
| lake, MICHIPICOTEN DIV. | 293 A | xiv |
| Alabastine. | | |
| <i>See also</i> Gypsum, and Paris, Ont. | | |
| Description of..... | 196, 197 | iii |
| Factories for working..... | 254 | ii |
| Manufacture of..... | 121 | R C |
| Statistics..... | 114 | i |
| 1892..... | 10 | ii |
| 1893..... | 10 | iii |
| 1902..... | 38 | xii |
| Uses of..... | 121 | R C |
| | 114 | i |
| | 281 | v |
| Co. | | |
| Contract of, with Adamant Mfg. Co..... | 279 | vi |
| Evidence <i>re</i> , before Royal Com.. | 121 | R C |
| Factory of, at Paris, Ont..... | 38 | xii |
| Government drill used by..... | 28 A | xv |
| Gypsum mining by..... | 243 | i |
| | 253 | ii |
| | 197-199 | iii |
| Gypsum treated by, value of, 1905 | 24 A | xv |
| Notes on, 1890..... | 113, 114 | i |
| Operating, 1906..... | 25 A | xvi |
| Products of..... | 21 A | xiii |
| Alais, FRANCE. | | |
| Mining school at..... | 498 | R C |
| Pyrites near..... | 192 A | xvi |
| Alaska, U. S. | | |
| Gold in. <i>See</i> Treadwell gold mine. | | |
| Platinum in..... | 142 | vii |
| Treadwell gold mine. <i>See</i> Treadwell gold mine. | | |

| | Page. | Vol. | | Page. | Vol. |
|--|------------|------|---|------------|------|
| Albany factory. <i>See</i> Fort Albany. | | | Alder. — <i>Con.</i> | | |
| river, JAMES BAY. | | | Seine river..... | 74 | vi |
| Coal on, bituminous..... | 123 | iv | Wabigoon lake, near..... | 171 B | vii |
| lignite..... | 125 | iv | black | | |
| Distance from mouth of, to Span- | | | Black river..... | 185 | xii |
| ish river..... | 192 | v | Eby tp..... | 176 | xii |
| Fossils on, marine..... | 50 | R C | Mississagi river..... | 161 | xii |
| Iron ore on..... | 23 | R C | green | | |
| hematite..... | 314 | xii | Mattagami valley..... | 150 A | xv |
| Jasper pebbles on..... | 314 | xii | Michipicoten div..... | 296 A | xiv |
| Length of..... | 103 | iv | Moose River basin..... | 176 A | xiii |
| Mouth of, soil and climate..... | 107 | iv | mountain | | |
| suitability for harbour, | | | Abitibi dist..... | 126 A | xiii |
| notes by Low..... | 129 | iv | white or hoary | | |
| Minor ref. to..... | 201 | v | Abitibi dist..... | 244, 242 A | xiv |
| Navigation on..... | 103 | iv | Michipicoten div..... | 296 A | xiv |
| Notes on, by Gibson..... | 111 | iv | Moose River basin..... | 176 A | xiii |
| geological..... | 111, 112 B | xiii | blight. | | |
| Pine on, Banksian..... | 120 | iv | Abitibi dist..... | 129 A | xvi |
| Portages on..... | 105 | iv | Street Natural Gas Co. | | |
| Rocks on and near, limestone..... | 93 | v | Capital and date of charter..... | 29 A | xvi |
| Niagara..... | 44 | R C | Aldehyde. | | |
| Huronian..... | 31 B | xiii | Composition of..... | 33 | v |
| Water-power on..... | 124 | iv | Alemtejo prov., PORTUGAL | | |
| Albany river, MISSISSAUGI RIVER, | 252 | vii | Pyrites deposits in..... | 192 A | xvi |
| ALG..... | 195 | viii | "Alert" | 131 | iv |
| Albee, O.W. | 80 A | xv | Alexander, Sir William | 22 | i |
| Albermarle tp., BRUCE CO. | | | Alexandra Oil and Development Co. | | |
| Cement works in. <i>See</i> Colonial | | | Exhibits of, at Pan-American | | |
| Portland Cement Co. | | | Exhibition..... | 25 A | xv |
| Medina and Clinton formations in | 35 B | xiii | Alexandria, LOCHIEL TP., GLENGARRY | | |
| Albert co., N.B. | | | CO. | | |
| Albite in..... | 219 | vi | Limestone at, Cambro-Silurian, | | |
| Mining Co. | | | quarried..... | 46 B | xiii |
| Capital and date of charter..... | 29 A | xvi | "Alfenide." | | |
| "Alberta" S.S. | 106-112 | v | Manufacture of, notes on..... | 160 | ii |
| Albite. | | | Alfred, ALFRED TP., PRESCOTT CO. | | |
| New Brunswick..... | 161 | vi | Peat plant at..... | 25 A | xiv |
| analysis..... | 166 | vi | Limestone in, quarried..... | 99 B | xiii |
| Notes by Goodwin..... | 219 | vi | Trenton..... | 98 B | xiii |
| Albion tp., PEEL CO., | | | Alga. | | |
| Brickyard in. <i>See</i> Bolton. | | | Ottawa (near)..... | 225 | x |
| Limestone in..... | 95 B | xiii | Alger, General | 198 | R C |
| Terrace in. <i>See</i> Mono Mills. | | | | 97 | vi |
| Albite (PERISTERITE). | | | Algoma Central Hudson Bay Ry., | | |
| Apatite districts..... | 442 | R C | Brick clays on..... | 96 | xi |
| Bathurst and Burleigh tps..... | 190 | ii | Clay used by, analysis of..... | 27 B | xv |
| Analysis..... | 194 | ii | Dock of, Michipicoten harbour..... | 127 | x |
| ..... | 206 | ix | Land grant to, effect of..... | 70 | xi |
| Definition of..... | 528 | R C | ..... | 62 | xii |
| Hardness and specific gravity of | 202 | vi | Origin of..... | 91 | xi |
| Notes on, by Goodwin..... | 225 | vi | Stone producing..... | 28 | xii |
| Occurrences..... | 193 | ix | Coal Mg. Co. | | |
| Alborg kilns, | | | Capital and date of charter..... | 7 | vi |
| For cement, notes on..... | 129, 130 A | xiv | ..... | 7 | vii |
| Aldborough tp., ELGIN CO. | | | Commercial Co. <i>See</i> Com- | | |
| Natural gas in..... | 29 | v | mercial Co. of Algoma. | | |
| Oil in, boring for..... | 5 | v | Consolidated Silver Mines Co. | | |
| ..... | 19, 21 | vi | Capital and date of charter..... | 5 | xii |
| Alder. | | | Copper Mg. Co. | | |
| Abitibi dist..... | 189, 193 | viii | Capital and date of charter..... | 7 | vi |
| ..... | 205, 252 A | xiv | ..... | 7 | vii |
| covered with blight..... | 129 A | xiii | Custom Smelting and Refin- | | |
| Black river..... | 185 | xii | ing Co. | | |
| Mattagami valley..... | 189, 190 A | xv | Capital and date of charter..... | 27 A | xvi |
| ..... | 140 A | xv | dist. | | |
| Shebandowan Lake region..... | 205 | v | Explorations in: | | |
| | | | eastern boundary, rep. by Parks. | 174-196 | viii |

| | Page. | Vol. | | Page. | Vol. |
|---|---------|--------|--|---------------|--------|
| Algoma dist.—<i>Con.</i> | | | Algona tp., KENNEWICK CO. | | |
| Explorations in, <i>Con.</i> | | | Corundum belt in | 205, 224 | viii |
| Bell | 135-198 | A xiii | Utica in. <i>See</i> Castile. | | |
| southeast portion, rep. by | | | Algonkian formation (MARQUETTE | | |
| Graton | 157-172 | xii | <i>SERIES.</i>) | | |
| <i>See also</i> reports on Sudbury dist., | | | Michigan, U.S., notes by Coleman. | 151 | ix |
| Michipicoten div., Moose River | | | Similar to Huronian of Canada.. | 162 | x |
| basin, etc. | | | Algonquin beach | | |
| Iron ores in, paper by Miller. | 314-317 | xii | The d'ford, near | 156 | xii |
| Limestone in, notes by Miller... | 29 | B xiii | Algonquin Gold Mining and Devel- | | |
| Map of northern portion | with A | xiii | <i>opment Co.</i> | | |
| Mining lands in, statistics of sales | | | Capital and date of charter | 7 | vii |
| and leases, 1891 | 7, 8 | i | National park, Nip. | | |
| 1892 | 7 | ii | Waterfalls in | 252 | vii |
| 1893 | 5 | iii | Alice A. gold mine, LITTLE TURTLE | | |
| 1894 | 10 | iv | RIVER, R. R. D. | | |
| 1895 | 9 | v | Minor ref. to | 75 | vii |
| 1896 | 10 | vi | Notes on, 1897 | 129 | vii |
| 1897 | 14, 15 | vii | 1898 | 46, 80, 274 | viii |
| 1898 | 10 | viii | 1899 | 75 | ix |
| 1899 | 11 | ix | Operations suspended, 1900 | 84 | x |
| 1900 | 10 | x | Rocks in | 150 | ix |
| 1901 | 12 | xi | felsite schists | 82, 263 | xiii |
| 1902 | 10 | xii | Alkali. | | |
| 1903 | 36 | A xiii | For clarifying mercury plates ... | 241 | vi |
| 1904 | 23 | A xiv | For sulphite pulp | 91 | xi |
| 1905 | 24 | A xv | Iron pyrites for | 256 | v |
| 1906 | 26 | A xvi | Manufacture of, at Sault Ste. | | |
| Population of unorganized por- | | | Marie | 65-68 | x |
| tion, 1891 | 134 | iv | " | 66 | xi |
| Gold Mining and Reduction | | | " | 78 | x |
| <i>Co.</i> | | | F. B. | 56, 61 | iii |
| Capital and date of charter | 7 | vii | F. G. B. | 109 | ix |
| Mills, ALG. | | | " | 136 | A xiv |
| Copper near | 404 | R C | Hon. George W. | | |
| Granite north of | 69 | i | Iron mining by, N. Crosby tp. | | |
| Iron prospecting at | 25 | vii | " | 44, 50, 54 | ii |
| Slate near | 73 | i | Sir Hugh | 95 | R C |
| for roofing | 93 | i | J. | 115 | ix |
| Mineral Land Co. | | | J. A. | 275 | v |
| Capital and date of charter | 7 | vii | (<i>See also</i> Calabogie Mg. Co.) | | |
| Mining Co. | | | J. G. | | |
| Claims held by, list of | 96 | xii | Gold mining by, Michipicoten | | |
| Algoma-Nipissing line. <i>See</i> Nip- | | | div. | 115 | ix |
| issing-Algoma line. | | | Graphite mining by. <i>See</i> Allan- | | |
| Algoma Power Co. | | | hurst graphite mine. | | |
| Work by, at High Falls | 67 | A xv | John R. <i>See</i> Cameron Island | | |
| " | 68 | A xvi | Gold Mg. Co. | 68 | viii |
| Queen Mg. Co. | | | R. J. | 102 | vii |
| Capital and date of charter | 11 | xi | W. A. | | |
| Sands | | | Evidence by, before Royal | | |
| Description of | 53 | i | Com. | 150, 178, 424 | R C |
| and distribution .. | 51 | R C | Mica mining by, N. Burgess tp.. | 277 | v |
| Named by Bell | 4 | R C | Owner, Pike Lake mica mine.... | 132 | x |
| silver mine, MACGREGOR TP., | | | " | 287 | xi |
| TH B. D. | 149 | ix | West Silver Glance mine. | 203 | R C |
| Steel Co. | | | W. G. | | |
| Accidents to employees of | 29 | A xv | Gold prospecting by, Michipi- | | |
| " | 32, 35 | A xvi | coten div. | 102, 197 | vii |
| Iron produced by, for steel rails, | 17 | A xvi | Gold Reefs Co. | | |
| Minor ref. to | 62 | xi | Capital and date of charter | 9 | ix |
| Officers of | 98 | xi | Allanhurst graphite mine, DEN- | | |
| Output, 1904 | 13, 14 | A xiv | BIGH TP., ADDINGTON CO. | | |
| Plant of, description | 22, 23 | xii | Commenced operations | 27 | xii |
| Tube Works | | | Operating, 1902 | 132 | xii |
| Minor ref. to | 62 | xi | 1903 | 12 | A xiii |
| Notes on, by Willmott | 99 | xi | Allanite | | |
| | | | Cerium in | 196 | ix |
| | | | Hollow lake, S. Muskoka river.. | 193 | ii |

| | Page. | Vol. | | Page. | Vol. |
|--|-----------|------|---|----------|------|
| Allanite. — <i>Con.</i> | | | Alumina. | | |
| Occurrences..... | 193 | ix | Composing emery..... | 533 | R C |
| Allan's mills, N. BURGESS TP., LAN- ARK CO. | | | Description of..... | 528 | R C |
| Iron ore at..... | 38, 42 | ii | Aluminium. | | |
| Rocks at..... | 88 B | xiii | As an alloy with ingot iron..... | 384 | R C |
| limestone..... | 65 B | xiii | nickel..... | 183 | iv |
| Allard, Delores | | | "..... | 217 | vii |
| Accident to..... | 50, 57 | xi | Corundum as an ore of..... | 217, 247 | vii |
| Alleghany mts., U.S. | | | "..... | 247 | viii |
| Uplift of..... | 142 | i | "..... | 19 A | xiii |
| Allemont, DAUPHINÉ, FRANCE. | | | Discovery of, notes by Blue..... | 173 | i |
| Silver at..... | 63, 65 B | xiv | Kaolin in production of..... | 4 | i |
| Allen, George F. | 272 | v | Notes on, by Richards..... | 247 | viii |
| J. E. | 140 | x | Price of, 1898..... | 217 | vii |
| Allie island, L. OF THE WOODS. | 181, 185 | v | Production of, Europe, 1897..... | 217 | vii |
| Allison, J. Wesley | 23 | xii | Proportion of, in earth's crust..... | 447 | R C |
| Allison and Platt. | | | Ruby and sapphire from..... | 448 | R C |
| Iron ore exhibited by, at World's Fair..... | 79 | ii | United States, production, 1888..... | 525 | R C |
| Alliston, TECUMSETH TP., SIMCOE CO. | 99 B | xv | 1897..... | 217 | vii |
| Allumette island, OTTAWA RIVER. | | | Aluminium ore. <i>See</i> Corundum. | | |
| Rocks on..... | 104 B | xiii | sulphate. | | |
| Alluvial gold. <i>See</i> Gold. | | | Lac Seul (reported)..... | 180 | vii |
| Allworth, Dr. E. | 117 | i | Alun. <i>See</i> Kalinite. | | |
| Alma, PEEL TP., WELLINGTON CO. | | | Alunite. | | |
| Gas well near, log of..... | 110-114 A | xv | Description of..... | 217 | vi |
| Trenton formation at, height above tide level..... | 113 A | xv | Hardness and specific gravity of..... | 202 | vi |
| Almandine. <i>See</i> Garnet. | | | Alveolites. | | |
| Almonte lake, MICHIPICOTEN DIV., ALG. | 179 A | xv | Abitibi river..... | 187 | viii |
| Almus. <i>See</i> Alder. | | | <i>goldfusi.</i> | | |
| " (fossil) | | | Cayuga, N. tp..... | 146 | xii |
| Ottawa, near..... | 225 | x | Thedford (near)..... | 154 | xii |
| " <i>americana.</i> <i>See</i> Elm, swamp | | | " <i>squamosus.</i> | | |
| " <i>incana.</i> <i>See</i> Alder, white or hoary | | | Kwataboahegan river..... | 181 A | xiii |
| " <i>viridis.</i> <i>See</i> Alder, green | | | " <i>vallorum.</i> | | |
| Alpena Oil and Gas Co. | | | Alvinston, BROOKE TP., LAMBTON CO. | | |
| Capital and date of charter..... | 24 A | xiii | Brick yard at, notes on..... | 74 B | xv |
| Alpha Oil, Gas and Mining Co. | | | Shale at, analysis..... | 8 B | xv |
| Capital and date of charter..... | 7 | vii | Amabel tp., BRUCE CO. | | |
| Alps, The, SWITZERLAND. | | | <i>See also</i> Hepworth. | | |
| Apatite of, character..... | 189 | ii | Cement works in. <i>See</i> Wiarton. | | |
| Alsace-Lorraine, GERMANY. | | | Limestone in. <i>See</i> Chief pt. | | |
| Tax in, on mineral industry..... | 297 | R C | Natural gas in..... | 21 | x |
| Alsophila pomutaria. <i>See</i> Canker- worm, fall | | | "..... | 45 | xi |
| Alston, H. D. | 248 | xi | log of boring..... | 109 A | xv |
| Altitudes. | | | Oil in, boring for..... | 24 A | xiii |
| Bremner station..... | 136 | viii | Amalgamated Cobalt Mines. | | |
| Lac Seul..... | 113 | vi | Capital and date of charter..... | 27 A | xvi |
| Lake Superior..... | 112 | vi | Oil Co. | | |
| Mackay mt..... | 133 | vii | Capital and date of charter..... | 29 A | xvi |
| McMaster lake..... | 140 | viii | Petroleum Producers. | | |
| Michipicoten div..... | 188 | vii | Capital and date of charter..... | 29 A | xvi |
| Tip-top mt..... | 142 | viii | Silver Mines Co. | | |
| Sinclair mt..... | 177 | vi | Capital and date of charter..... | 31 A | xvi |
| Thunder cape, summit..... | 138 | vi | Amazon stone. | | |
| "Altitudes in Canada." by J. White. | 8 C | xiv | <i>See also</i> Microline. | | |
| Alton, MADISON CO., ILL. | 105 A | xvi | Colorado, U. S., El Paso..... | 236 | vii |
| Brick paving at..... | 113 | iii | Pikes peak..... | 225 | vi |
| Alum. | | | Sebastopol tp..... | 193 | ii |
| Alumina obtained by calcining..... | 173 | i | Amazonite. | | |
| Sulphuric acid for..... | 199 A | xvi | Occurrences of..... | 133 | ix |
| Alum stone. <i>See</i> Alunite. | | | Amber. | | |
| | | | Derivation of..... | 220 | vi |
| | | | Frontenac co., with mica..... | 245 | i |
| | | | Ambouchia radiata. | | |
| | | | Gore Bay..... | 77 B | xiii |
| | | | Ambrose Gold mine, GULL ISLAND, L. OF THE WOODS. | | |
| | | | Notes on, 1898..... | 39 | vii |
| | | | Mine and Development Co. | | |
| | | | Capital and date of charter..... | 7 | vii |

| | Page. | Vol. |
|--|---------------------|------|
| <i>Amelanchier canadensis</i> . See Service berry. | | |
| American and Canadian Gold Mg. Co. | | |
| Work by, Little Turtle river | 129 | vii |
| | 46, | 81 |
| Cobalt Mines. | | |
| Capital and date of charter | 29 A | xvi |
| Iron Works. (JONES AND LAUGHLINS.) | | |
| Labour employed by, statistics | 370 | R C |
| Output of, 1893 | 119 | ii |
| Madoc Mg. Co. | | |
| See also Jarman pyrites mine. | | |
| Nichols Chemical Co. | | |
| Accidents to employees of | 29 A | xv |
| | 33, | 35 A |
| Capital and date of charter | 25 A | xiv |
| | 26 A | xv |
| Operating, 1904 | 19 A | xiv |
| 1905 | 20 A | xv |
| 1906 | 21 A | xvi |
| Bannoekburn mine | 154 A | xvi |
| Nickel Works, Ltd. | | |
| Included in International Nickel Co. | 140 C | xiv |
| Oil Co. | | |
| Oil producing | 24 | vi |
| Silver King Mg. Co. | | |
| Capital and date of charter | 29 A | xvi |
| Silver mine, COBALT, NIP. | | |
| Prod. cing, 1905 | 7 A | xv |
| Smelting and Refining Co. | | |
| Cobalt ores purchased by | 11 A | xvi |
| Wire and Steel Co. | | |
| Iron mining by, Atikokan range. | 112 | x |
| Ames, Mr. | 59 A | xvi |
| Amethyst | | |
| Annaberg, Saxony | 61 B | xiv |
| Cape Blomidon, N. S. | 223 | vi |
| Exhibited at World's Fair | 187 | ii |
| Lake Superior | 61 | R C |
| | 193 | ii |
| Port Arthur vicinity | 192 | R C |
| Notes on, by Miller | 193 | ix |
| See also Amethyst quartz. | | |
| harbour, MACGREGOR TP., TB. | | |
| B. D. | | |
| Amethyst at | 193 | ix |
| Iron ore from, at World's Fair | 79 | ii |
| quartz. | | |
| Bear bay, L. of the Woods | 99 | vi |
| Thunder bay, L. Superior | 131 | vi |
| Amey, C. I. | | |
| Gold prospecting by, near Wawa lake | 102, 184, 187, 195, | vii |
| George F. | 48-50 | x |
| H. | 90 A | xvi |
| Amherst island, L. ONTARIO. | | |
| Trenton formation on | 41 | R C |
| | 44 B | xiii |
| fossils in | 27 B | xiii |
| Amherstburg, MALDEN TP., ESSEX CO. | | |
| Limestone in, analysis | 42 B | xiii |
| for locks at Soo | 25 B | xiii |
| sugar factories | 3 B | xiii |
| quarrying | 101 | i |
| Quarry Co. | 28 | xii |

| | Page. | Vol. |
|--|-----------|------|
| Ami, Dr. H. M. | | |
| Acknowledgments to | 215, 224 | x |
| Borings examined by: | | |
| Comber well | 43 B | xiii |
| Ottawa clay | 30, | 31 B |
| Pelee island | 117 A | xiv |
| Fossils determined by, Manitoulin island | 84 B | xiii |
| Notes by, on Saxicava sand | 32 B | xv |
| Ref. to surveys by, in Carleton co. | 37 B | xiii |
| Amianthus. See Asbestos. | | |
| Ammonium sulphate. | | |
| Line used in making | 3 B | xiii |
| Price of: import of, from Germany | 169 | R C |
| Ammunition. | | |
| Arsenic for hardening | 114, 117 | xi |
| Nickel for | 146, 147, | 153 |
| notes by Levat | 160 | ii |
| <i>Ampelis cedrorum.</i> See Waxwing, cedar | | |
| Amphibole. | | |
| Hardness and specific gravity of. | 202 | vi |
| Notes on, by Goodwin | 227 | vi |
| Amphibolite. | | |
| See also Hornblende. | | |
| Animikie iron range | 161 A | xv |
| Appalachian mts. | 242 | viii |
| <i>Amphigenia elongata.</i> | | |
| Kwataboahegan river | 186 A | xiii |
| Port Colborne, near | 35 | xi |
| Ami and Folger mica mine, LOUGH-BORO TP., FRONTENAC CO. | | |
| Notes on, 1892 | 250 | ii |
| Amygdaloids. | | |
| Definition of | 528 | R C |
| L. Superior copper dist. | 84-87 | iii |
| caves in, photo | 152, 153 | viii |
| Michigan mines | 144 | ix |
| notes by Coleman | 149 | vii |
| | 171 | viii |
| Pigeon River dist | 146, 147 | ix |
| Amyot station, MICHIPICOTEN DIV., ALG. | 3 Bull. | iii |
| Amyott ? | 102 | viii |
| Amytis (MEDIAN PRINCESS) | 166 | i |
| Analcite. | | |
| L. Superior, N. shore | 193 | ii |
| | 193 | ix |
| Heron bay | 172, 173 | viii |
| basalt, | | |
| Colorado | 190 | ix |
| The Basin, analysis | 173 | viii |
| =tinguaite. See Heronite. | | |
| ANALYSES. | | |
| Actinolite. | | |
| Average | 90 | iii |
| | 192 | ix |
| Analcite. | | |
| Heron bay | 173 | viii |
| Andesine. | | |
| North Sherbrooke tp. | 193 | ix |
| Anorthosites. | | |
| Seine River dist. | 100 | v |
| Various | 226, 227 | viii |
| Anthraxofite. | | |
| See below, Fossil fuels. | | |

| | Page. | Vol. |
|---------------------------------------|--------|---------|
| Analyses.—Con. | | |
| Thunder bay Argentite. | 194 | ix |
| Arsenic-nickel ores. | | |
| <i>See below, Cobalt nickel ores.</i> | | |
| Asbestos. | | |
| Average | 90 | iii |
| Various..... | 97 | iii |
| Bessemer matte. | | |
| Bismuth. | | |
| Cobalt, Ont..... | 22 B | xiv |
| Blueite. | | |
| Sudbury dist..... | 168 | ii |
| | 282 | xii |
| Gertrude mine | 160 C | xiv |
| Breccia. | | |
| Coleman tp..... | 48 B | xiv |
| Onaping river..... | 86 | i |
| Calcite. | | |
| Cross lake, Coleman tp..... | 23 B | xiv |
| Cancrinite-syenite. | | |
| Siksjoberg. Sweden | 173 | viii |
| Celestite. | | |
| | 196 | ix |
| Chert. | | |
| Michipicoten div..... | 309 | xiv |
| Chloanthite. | | |
| Cobalt dist..... | 98 A | xiii |
| | 19 B | xiv |
| Chrysotile. | | |
| Clay. | | |
| Don valley | 127 | iii |
| Garafraxa tp..... | 16 | x |
| Haileybury, near..... | 33 B | xiv |
| Lake Superior, Alg..... | 96 | xi |
| Marlbank..... | 16 | x |
| Pure | 116 | iii |
| Standard for cement..... | 124 | A xiv |
| ThurLOW tp | 34 | xii |
| Toronto | 128 | iii |
| United States, various | 120 | iii |
| Ohio | 119 | iii |
| Various..... | 160 A | xiii |
| Williams lake..... | 108 | ix |
| Clay, boulder | | |
| Lac du Bonnet, Man..... | 92 B | xv |
| Clay, Erie | | |
| Alvinstone..... | 74 B | xv |
| Beaverton | 87 B | xv |
| Picton..... | 95 B | xv |
| Stratford..... | 91 | 93 B xv |
| Thedford | 75 B | xv |
| Various..... | 14 | 15 B xv |
| Waterloo | 103 B | xv |
| Clay, fire | | |
| Toronto, near..... | 54 | R C |
| Clay for pipes. | | |
| Hamilton..... | 129 | iii |
| Mimico..... | 128 | iii |
| Clay, Leda | | |
| Clay, red-top | | |
| Average | 17 B | xv |
| Conestogo | 104 B | xv |
| Clay, Saugeen | | |
| Average..... | 23, 26 | 27 B xv |
| Casselman..... | 97 B | xv |
| Haileybury, near | 32 B | xiv |
| Pembroke | 96 B | xv |
| Sudbury, near..... | 26 | 27 B xv |

| | Page. | Vol. |
|-------------------------------------|------------|------|
| Analyses.—Con. | | |
| Clinocllore. | | |
| Bagot tp..... | 196 | ix |
| Coal. | | |
| <i>See below, Fossil fuels.</i> | | |
| Cobalt-nickel ores. | | |
| <i>See also below, Nickel ores.</i> | | |
| Coleman tp..... | 21 B | xiv |
| Rabbit lake..... | 29 B | xiv |
| Sudbury dist..... | 98-101 A | xiii |
| Cobaltite. | | |
| Cobalt, Ont..... | 23 B | xiv |
| Columbite. | | |
| Lyndoch tp..... | 236 | vii |
| Concentrates. | | |
| Deloro gold mine | 106 | xi |
| Coracite. | | |
| Mamainse | 197 | ix |
| Corundum. | | |
| Paper by Goodwin | 238, 239 | vii |
| Diabase. | | |
| Animikie iron range..... | 171 A | xv |
| Sudbury dist | 126 C | xiv |
| Diopside. | | |
| Madawaska river..... | 197 | ix |
| Diorite. | | |
| Port Coldwell..... | 148 B | vii |
| Dolerite. | | |
| Abitibi dist..... | 117 A | xiii |
| Dolomite. | | |
| <i>See below, Limestone.</i> | | |
| Enamels. | | |
| Venetian | 120 | xi |
| Feldspar. | | |
| Bedford tp..... | 26 | x |
| | 81 A | xiv |
| Port Coldwell..... | 147 B | vii |
| Folgerite. | | |
| Worthington nickel mine | 167, 168 | ii |
| Fossil fuels. | | |
| | 184 | i |
| | 194 | xii |
| Anthracite..... | 4, 5 Bull. | ii |
| Anthraxolite..... | 162, 163 | vi |
| Balfour tp..... | 194 | ix |
| | 96 C | xiv |
| Kingston dist | 194 | ix |
| Carbonaceous minerals | 166 | vi |
| Coals, various..... | 175 A | xiii |
| Lignite, Abitibi river..... | 188 | viii |
| Missinaibi river..... | 127 | iv |
| Moose river | 174 A | xiii |
| Galena. | | |
| Cross lake, Timagami dist | 101 A | xiii |
| Loughborough tp | 94 A | xiii |
| Garnierite. | | |
| New Caledonia..... | 148 C | xiv |
| Gersdorffite. | | |
| Denison tp | 233 | i |
| Gneiss. | | |
| Hastings corundum dist..... | 227 | viii |
| Gossans. | | |
| | 186 A | xvi |
| Granite. | | |
| L. of the Woods, porphyritic | 122 | vi |
| Sudbury dist | 124 C | xiv |
| Graphite. | | |
| Brougham tp | 37 | v |
| | 24 | x |
| Gypsum. | | |
| Moose river..... | 159 A | xiii |

| Analyses. — <i>Con.</i> | Page | Vol. | Analyses. — <i>Con.</i> | Page | Vol. |
|---------------------------------|-------------------|--------|--------------------------------------|---------|--------|
| Hastingsite. | | | Limestone. | | |
| Dunegaunon tp. | 199 | ix | Addington co., Napanee | 75 | B xiii |
| Heronite. | | | Sheffield tp | 28 | B xiii |
| Heron bay, L. Superior..... | 188 | ix | Algoma dist., Geneva lake..... | 30 | xi |
| Hessite. | | | Manitoulin island..... | 29 | B xiii |
| Gold creek, L. of the Woods.... | 105 | v | Panache lake..... | 75 | B xiii |
| | 199 | ix | Rutherford tp | 83 | i |
| Iron ores. | | | St. Joseph island..... | 30 | B xiii |
| Animikie range..... | 168 | A xv | Rutherford tp | 31 | B xiii |
| Atikokan range..... | 71 | ii | St. Joseph island..... | 79 | B xiii |
| Garland mine | 75 | ii | Animikie iron range..... | 163 | A xv |
| Bastard tp..... | 35 | ii | Brant co., Paris | 147 | xii |
| Bathurst tp..... | 81 | ii | 15, | 34 | B xiii |
| Belmont tp..... | 59, | 60 | ii | | |
| Black Sturgeon lake..... | 313 | xii | Carleton co., Gloucester tp..... | 38 | B xiii |
| Cardiff tp..... | 62 | ii | Nepean tp..... | 15 | B xiii |
| Darling tp..... | 141 | R C | Frontenac co..... | 44, | 45 |
| Galway tp..... | 131 | R C | Essex co., Anderdon tp..... | 41, | 42 |
| Glamorgan tp..... | 62 | ii | Pelée island..... | 43 | B xiii |
| Greenwater lake..... | 81 | v | Haileybury..... | 87 | B xiii |
| Hastings-Frontenac dist..... | 54, | 55 | ii | | |
| Hull, Que., (magnetite)..... | 32 | ii | Haldimand co..... | 54-56, | 118 |
| Hutton ranges (magnetic)..... | 218 | A xiii | Hagersville | 145 | xii |
| Hutton tp..... | 16, | 73 | 118 | B | xiii |
| Kesagami lake..... | 152 | A xiii | Springvale..... | 144 | xii |
| Kingston-Pembroke R'y dist..... | 130-132 | R C | Halton co..... | 58 | B xiii |
| Loon Lake dist..... | 259 | A xiv | Hastings co..... | 61, 62, | 65 |
| Matawin range..... | 83 | v | Belleville | 19 | B xiii |
| Mattagami valley..... | 77 | ii | Thurlow tp | 34 | xii |
| | 126 | iv | Huron co..... | 67, | 68 |
| | 154 | A xiv | Lambton co., Stony pt..... | 155 | xii |
| Mayo tp..... | 97 | A xv | Thedford | 155 | xii |
| Mesabi range..... | 101 | ix | 69 | B | xiii |
| Michipicoten div..... | 320, 322, 327-338 | A xiv | Lanark co..... | 70, | 71 |
| Batchawana bay, N. of | 163 | ix | Leeds co., Brockville..... | 73 | B xiii |
| Frances mine..... | 329 | A xiv | Lincoln co., Grimsby tp..... | 75 | B xiii |
| Goulais bay..... | 139 | xi | Lower Helderberg formation.... | 152 | xii |
| Gros Cap..... | 54, | 55 | ii | | |
| | 145 | viii | New Brunswick, St. John..... | 11 | B xiii |
| Helen mine..... | 155 | ix | Norfolk co., Woodhouse tp..... | 88 | B xiii |
| | 192, | 193 | x | | |
| | 94, | 170 | xi | | |
| Paint lake..... | 324 | A xiv | Northumberland co., Hamilton | | |
| Pyrrhotite lake..... | 305, | 332 | A xiv | tp..... | 13 |
| Monmouth tp..... | 62 | ii | Ontario co., Rama tp..... | 91 | B xiii |
| Nipigon Lake dist..... | 213 | x | Oxford co., Beachville..... | 148, | 149 |
| | 127 | A xvi | 92 | B | xiii |
| Still lake..... | 145 | A xvi | 92 | B | xiii |
| Whitefish lake..... | 144 | A xvi | 92 | B | xiii |
| North Crosby tp..... | 44, | 50 | ii | | |
| Port Henry (concentrates)..... | 350 | B C | Parry Isl. dist., Georgian bay ... | 96 | B |
| Radnor Forges, Que. (limonite) | 26 | ii | Perth co., St. Marys..... | 98 | B |
| Snowdon tp..... | 131 | R C | 100 | B | xiii |
| | 80, | 81 | ii | | |
| South Sherbrooke tp..... | 47, | 48 | ii | | |
| | 274 | v | Peterborough co..... | 106 | B |
| Tinagami island..... | 169 | x | Prince Edward co., Picton..... | 105, | 106 |
| Various localities..... | 201, | 202 | ix | | |
| Vermilion range..... | 75 | ii | Renfrew co., Rockland..... | 21 | x |
| Laurvikite. | | | Simcoe co., Tay tp..... | 110 | B |
| Byskoven, Norway..... | 211 | xi | Standard for cement..... | 183 | A |
| Lepidomelane. | | | Steep-rock lake..... | 307 | xi |
| Lime. | | | 100 | B | xiii |
| For Eddystone lighthouse, Eng.. | 107 | i | United States, for glass-making... 6 | B | xiii |
| Milton..... | 15 | A xiii | various..... | 13, | 15 |
| Nasagawaya tp..... | 59 | B xiii | Rosendale, N. Y.. | 34 | xi |
| Springvale..... | 54 | B xiii | 15 | B | xiii |
| | | | Various localities..... | 27 | B |
| | | | Victoria co..... | 113, | 114 |
| | | | Welland co., Humberstone tp..... | 34 | xi |
| | | | 13, | 118 | B |
| | | | Thorold..... | 15 | B |
| | | | Wellington co..... | 122 | B |
| | | | Wentworth co., Ancaster tp..... | 142 | xii |
| | | | 125 | B | xiii |
| | | | Rymal (near)..... | 126 | B |
| | | | Lithographic stone. | | |
| | | | Crow lake, Marmora tp..... | 61 | B |
| | | | Various..... | 181-183 | ii |

| | Page. | Vol. |
|--|----------------|-------|
| Analyses.—Con. | | |
| Loganite. | | |
| North Burgess tp..... | 201 | ix |
| Lollingite. | | |
| Galway tp..... | 201 | ix |
| Marbles. (<i>See also</i> Limestone) | 65 B | xiii |
| Marl. | | |
| Addington co., Sheffield tp..... | 128 B | xiii |
| Carleton co..... | 39 B | xii |
| Emerald lake, Nip..... | 87 B | xiii |
| Grey co..... | 51 B | xiii |
| Holland tp..... | 16 | x |
| Hastings co., Marlbank..... | 16 | x |
| Lanark co., Lavant tp..... | 71 B | xiii |
| Montreal river, N. of northern arm..... | 209 A | xiv |
| Pikiti-gouching river..... | 112 B | xiii |
| Standard for cement..... | 183 A | xiv |
| Victoria co., Manila..... | 114 B | xiii |
| Wellington co..... | 122 B | xiii |
| Garafraxa tp..... | 16 | x |
| Meteorite. | | |
| Welland..... | 203 | ix |
| Mica. | | |
| <i>See also below.</i> Phlogopite. | | |
| Different varieties..... | 83 A | xiv |
| Mispickel. | | |
| Graham tp..... | 205 | ix |
| Hastings co..... | 101 | xi |
| Timagami (near)..... | 23 B | xiv |
| Molybdenite. | | |
| Haliburton dist..... | 46 | xi |
| Moss litter. | | |
| <i>See below</i> Peat meal. | | |
| Natural gas. | | |
| East Tilbury tp..... | 99 A | xvi |
| Nepheline-syenite. | | |
| Blue mts..... | 207 | viii |
| Niccolite. | | |
| Cobalt, Ont..... | 19 B | xiv |
| Nickel. | | |
| Commercial..... | 223 | ix |
| Nickel matte. | | |
| Norway..... | 154 C | xiv |
| Sudbury dist..... | 380 | B C |
| ..... | 154 | ii |
| ..... | 152 C | xiv |
| Nickel ores. | | |
| Canadian compared with Nor- wegian..... | 283 | xii |
| James lake (near)..... | 180 | x |
| New Caledonia..... | 151 | ii |
| Net lake..... | 180 | x |
| Refined at Smethwick, Eng..... | 114 | viii |
| Sudbury dist..... | 88 | i |
| ..... | 208 | ix |
| Norite. | | |
| Sudbury dist..... | 112, 116, 117, | 120 C |
| Ochre, Yellow | | |
| Boyer lake..... | 169 | xi |
| Paragrene. | | |
| Pargasite. | | |
| Madawaska river..... | 206 | ix |
| Paris green. | | |
| Peat. | | |
| Abitibi dist..... | 209 A | xiv |
| ..... | 128 A | xv |
| As a fuel..... | 183 | i |
| ..... | 194 | xii |

Analyses.—Con.

| | | |
|---|-----------------|------|
| Peat.—Con. | | |
| General..... | 202, 203 | xii |
| Matta ami valley..... | 128 A | xv |
| Montreal, east of..... | 201 | ii |
| Treated by Dickson process..... | 201 | i |
| Peat gas. | 230 | xii |
| Peat meal. | 191 | vi |
| Pentlandite. | | |
| Sudbury ores..... | 159 C | xiv |
| Peristerite. | | |
| Bathurst tp..... | 206 | ix |
| Perthite. | 206 | ix |
| Phlogopite. | | |
| North Burgess tp..... | 207 | ix |
| Polydymite. | | |
| Sudbury ores..... | 159 C | xiv |
| Prehnite. | 207 | ix |
| Rensselaerite. | | |
| Charleston lake..... | 208 | ix |
| Rocks. | | |
| Animikie iron range..... | 171 A | xv |
| Corundum-bearing, paper by Goodwin..... | 238, 239 | vii |
| Cross lake, Coleman tp..... | 50 B | xiv |
| Nickel-bearing eruptive, Sudbury dist..... | 212, 213 A | xiii |
| Salt. | | |
| Seaforth..... | 208 | ix |
| Serpentine. | | |
| Pigeon lake, Montreal river..... | 82 B | xiii |
| Shale. | | |
| Beamsville..... | 79 B | xv |
| Various..... | 8 B | xv |
| Shale, bituminous | | |
| Kettle pt..... | 156 | xii |
| Shale, Hamilton | | |
| Nodule in, from Thedford..... | 154 | xii |
| Shale, Hudson River | | |
| Toronto..... | 114 B | xv |
| Various..... | 7 B | xv |
| Shale, Medina | | |
| Brampton..... | 89 B | xv |
| Fruitland..... | 105 B | xv |
| Port Credit..... | 90 B | xv |
| Various..... | 8 B | xv |
| Silver Ore. | | |
| Cobalt, Ont. (specimen)..... | 17 B | xiv |
| Slate. | | |
| Cobalt, Ont..... | 48 B | xiv |
| Paris, Ont..... | 34 B | xiii |
| Smaltite. | | |
| Gunnison co., Col..... | 71 B | xiv |
| Soils. | | |
| <i>See also above.</i> Clays. | | |
| Abitibi dist..... | 244, 246, 247 A | xiv |
| Mattagami valley..... | 153, 154 A | xv |
| Sperrylite. | | |
| Sudbury, dist..... | 162 C | xiv |
| Vermilion mine..... | 209 | ix |
| Typical..... | 181 | B C |
| Strontianite. | | |
| Nepean tp..... | 210 | ix |
| Syenites. | | |
| Abitibi dist..... | 118, 119 A | xiii |
| L. Superior, north shore..... | 211 | xi |
| Talc. | | |
| Grimsthorpe tp..... | 101 | iii |
| Typical..... | 210 | ix |

| | Page. | Vol. | | Page. | Vol. |
|--------------------------------------|------------|------|--|----------|------|
| Analyses. —Con. | | | Andersson, Abjorn | 199 | xii |
| Tetrahedrite. | | | Andesine. | | |
| Cobalt, Ont. | 22 B | xvi | N. Sherbrooke tp., analysis | 193 | ix |
| Trap dike. | | | Andesite. | | |
| Secley Bay, near..... | 231 | vii | Definition of..... | 235 | vii |
| Tuff. | | | Andison, H. | 102 | viii |
| Whitson lake, near..... | 132 c | xiv | Andradite, | | |
| Tuff, vitrophyre | | | Dungannon, Tudor tp., analysis..... | 193 | ix |
| Onaping River dist..... | 132 c | xiv | Andre, George. | 102 | vii |
| Wad. | 211 | ix | | 140 | x |
| Water. | | | | 73 | xi |
| Leamington..... | 58 | i | | 65 | xii |
| Mineral, various..... | 204, 205 | ix | | 48 | xiii |
| Raleigh tp. | 57 | i | (Indian) | 202 | vii |
| St. Thomas..... | 60 | i | J. | 48 A | xiii |
| Weed=killers. | | | lake, MICHIGICOTEN DIV., ALG. | | |
| New Zealand..... | 115 | xi | Rocks near..... | 158 | ix |
| Whartonite. | | | Andrews, C. | 102 | vii |
| Bleazard mine..... | 170 | ii | Francis | | |
| Whitebloom. | | | Evidence by, concerning:— | | |
| Coleman tp. | 18 B | xiv | rail freights..... | 241 | R C |
| Wilsonite. | | | Sudbury ores..... | 104, 426 | R C |
| Bathurst tp..... | 211 | ix | tariffs..... | 232 | R C |
| <i>Anaphalis margaritacea,</i> | | | timber speculators..... | 311 | R C |
| Mattagami valley..... | 150 B | xv | O. L. | 102 | vii |
| <i>Anas obscura.</i> See Duck, black | | | R. | 106 | x |
| Ancaster, BRANT CO. | | | | 148 | xi |
| Artesian well, near..... | 62 | i | T. | 23 | viii |
| Limestone near, Niagara..... | 141, 142 | xii | Andrew bay, L. OF THE WOODS, R. R. D. | | |
| notes..... | 123 B | xiii | Copper on, mining..... | 99 | vi |
| quarries..... | 125 B | xiii | native..... | 105 | v |
| Salt well near, analysis..... | 204 | ix | Gold mining on, 1896..... | 6 Bull. | i |
| Anchor Nail and Tack Works. | | | 1897..... | 38, 39 | 112 |
| Labour employed by, statistics..... | 370 | R C | Photo of part of..... | 64, 66 | vi |
| <i>Ancyrocrinus bulb. sus.</i> | | | Andrie, G. and Mrs. G. | 115 | ix |
| Stony pt., L. Huron..... | 155 | xii | Andromeda. | | |
| Andel, F. Van. | | | On peat bogs..... | 213 | ii |
| Pottery works of, Cornwall..... | 29 | xii | | 139 | iii |
| Anderdon tp., ESSEX CO. | | | <i>polifolia.</i> | | |
| Limestone in, Corniferous, paper | | | Abitibi Lake dist..... | 241 A | xiv |
| by Nattress..... | 123-127 | xi | Mattagami valley..... | 150 A | xv |
| quarrying..... | 101 | i | Anemone alba. | | |
| notes by Nattress..... | 41 B | xiii | Moose River basin..... | 177 A | xiii |
| photo..... | 32, 33 B | xiii | <i>memorosa</i> | | |
| Oil in, boring for..... | 42 B | xiii | Abitibi Lake dist..... | 241 A | xiv |
| Anderson, August | 42, 43, 50 | x | Mattagami valley..... | 150 A | xv |
| | 47, 48 | xii | Anemone parviflora. | | |
| Carl | 267 | xi | Abitibi Lake dist..... | 241 A | xiv |
| | 116 | xii | <i>pennsylvanica.</i> | | |
| Charles John | 29 | ix | Abitibi Lake dist..... | 241 A | xiv |
| Charles P. | 91 | viii | Mattagami valley..... | 150 A | xv |
| | 105 | x | Angelica atropurpurea. | | |
| Frank | 43, 50 | x | Abitibi dist..... | 241 A | xiv |
| H. | | | Angelina co., TEXAS. | | |
| Gold mining by, Vermilion river..... | 152 | x | Iron ore in..... | 101 | ii |
| James | 105 | vi | Angell. See Webster and Angell. | | |
| Oscar | 31, 32 | ix | Angel's Night=cap, IRON LAKE. | | |
| William | | | MICHIGICOTEN DIV. | | |
| Brick-making by, Crediton..... | 71 B | xv | Rocks at..... | 304 A | xiv |
| Anderson co., TEXAS. | | | Angers, FRANCE. | | |
| Iron ore in..... | 101 | ii | Technical high-school at..... | 494 | R C |
| tp., ALG. | | | Anglesea tp., ADDINGTON CO. | | |
| Copper mining in. See Ganson mine. | | | Arsenic in..... | 105 | xi |
| Taylor mine. | | | See also Kennefic claim. | | |
| Iron ore in, character..... | 315 | xiii | Rocks in, notes by Miller.... | 200-202 | xi |
| mining. See Williams | | | Anglesite (LEAD VITRIOL). | | |
| mine. | | | Determination of..... | 209 | vi |
| | | | Hardness and specific gravity of..... | 202 | vi |

| | Page. | Vol. | | Page. | Vol. |
|---|--------------|-------|---|------------------|--------|
| Anglian Mg. and Finance Co. | | | Animikie formation.—<i>Con.</i> | | |
| Work by, 1896..... | 50 | vi | Port Arthur region..... | 191 | R C |
| Angling island, RAINY LAKE, R.R.D. | | | | 204 | v |
| Quartz-diorite on..... | 78 | vi | | 56 B | xiv |
| Anglo-American Copper Mg. Co. | | | Animikie iron range.... | 163-167 | A xv |
| Capital and date of charter..... | 9 | ix | Blende lake..... | 30 | R C |
| Work by, Parry sound..... | 121 | x | composition..... | 101 | C xiv |
| Anglo-American Iron Co. | | | gold in..... | 39 | iv |
| Coe Hill Mg. Co. controlled by.. | 106 | ii | Gunflint lake..... | 76 | ii |
| Formation of..... | 170 | c xiv | Iron lake..... | 169 | A xv |
| Included in International Nickel | | | Kaministiquia river..... | 133 | vii |
| Co..... | 21 | xi | Kakabeka falls..... | 129 | xi |
| | 140, 172 | c xiv | Loon Lake region..... | 256, 273 | A xiv |
| Owning St. Charles iron mine... | 128 | x | iron-bearing..... | 257 | A xiv |
| | 261 | xi | Notes by McKellar..... | 237-239 | iv |
| Anglo-Canadian Gold Estates. | | | Roland..... | 225 | i |
| <i>See also</i> Reliance gold mine. | | | Silver-bearing..... | 33-36 | R C |
| Capital and date of charter..... | 10 | x | Silver mt..... | 96 | viii |
| Licence to, terms of..... | 40 | x | Thunder bay, notes by Cole- | | |
| Work by, 1900..... | 40, 41 | x | man..... | 149 | ix |
| 1901..... | | | cape, thickness..... | 124 | ix |
| 16, 17, 150, 240, 241, 256 | | xi | Upper Copper-bearing rocks.. | | |
| 1902..... | 15, 87 | xii | | 133, 134 | vi |
| La Mascotte gold mine | 73 | ix | Silver islet..... | 105 | v |
| Sturgeon Lake dist.. | 46-48 | ix | Worth prospecting for copper. | 148 | ix |
| Phosphate Co. | | | Sudbury dist., notes by Cole- | | |
| Evidence by, before R.C.... | 174, 175 | R C | man..... | 93, 94 | c xiv |
| Veins in claims of, character.... | 440 | R C | sub-divisions. 10, 14 | c xiv | |
| Anglo-French Nickel Syn. | | | Animikie Iron range. | | |
| Cobalt ores purchased by..... | 11 | A xvi | Map of..... | With Vol. | xv |
| Anglo-Ontario Exploration and | | | Photos of..... | 13, 44 | A xiv |
| Gold Mining Co. | | | Report on, by Silver..... | 156-172 | A xv |
| Capital and date of charter..... | 7 | vii | <i>See also</i> Loon lake, McTavish tp. | | |
| Anglo-Saxon Gold Mining Co. | | | Animikite. | | |
| Capital and date of charter..... | 7 | vii | Port Arthursilver dist..... | 55, 58 | B xiv |
| Anglo-Sicilian Corporation. | | | Silver Islet mine | 33 R C: 191, 193 | ii |
| Sulphur industry controlled by.. | | | | 193 | ix |
| | 199, 200 | A xvi | Aninchigaming lake, MICHIPICOTEN | | |
| Angove, John..... | 273 | viii | DIV., ALG..... | 191 | vii |
| | 72 | ix | Anjigomi lake, ANJIGOMI RIVER, ALG. | | |
| Angus Islets Silver Mining Co. | | | Character of country near..... | 200 | A xv |
| Capital and date of charter..... | 7 | vii | Glaciation near..... | 192, 198, | 201 |
| Anhydrite. | | | Granite on..... | 205 | A xv |
| Association of, with limestones | | | Iron formation near..... | 179 | A xv |
| and marls..... | 120 | R C | Michipicoten schists on..... | 202 | A xv |
| Description of..... | 222 | vi | river, MICHIPICOTEN RIVER, | | |
| Hardness of; specific gravity of. | 202 | vi | L. SUPERIOR..... | 176 | A xiv |
| Occurrences of..... | 193 | ix | Anjikoming. <i>See</i> Anzhekumming. | | |
| Sperenberg, Germany..... | 120 | R C | Ankstrom, Charles..... | 236, 237 | v |
| Anikojigami lake, N. OF OTTO TP., | | | John..... | 236 | v |
| NIP. | | | Ann lake, NEAR GARDEN RIVER, ALG. | 123 | viii |
| Description of, by Bolton... | 182, 183 | xii | Annabella Mining Co. | | |
| Rocks on, petrographical notes.. | 189 | xii | Exhibits of, at Buffalo..... | 25 | A xv |
| Aniline dyes. | | | Annaberg, SAXONY. | | |
| Arsenic used in..... | 85, 114, 120 | xi | Cobalt at..... | 6, 51 | B xiv |
| | 32 | B xiv | silver ores of..... | 61, 62 | B xiv |
| Discovery of..... | 33 | v | Annabergite (NICKEL BLOOM), | | |
| Anima-Nipissing Silver Mines. | | | Annaberg, Saxony..... | 61, 62 | B xiv |
| Capital and date of charter..... | 27 | A xvi | Cobalt dist..... | xi, 98 | A xiii |
| Animikie formation. | | | | 12, 13 | B xiv |
| Distribution of..... | 31-33 | R C | Port Arthur silver dist..... | 58 | B xiv |
| Iron ores of, notes by Coleman.. | | | Silver islet..... | 193 | ix |
| | 141, 142 | xi | | 55 | B xiv |
| Mesabi iron range..... | 77 | ii | Annapolis, MARYLAND, U. S. | | |
| | 153 | ix | Armour plate tests at..... | 136 | ii |
| | 197, | x | | 171, 172 | c xiv |
| Named by Sterry Hunt..... | 4 | R C | Annie Milling Co. | | |
| Nipigon Lake dist..... | 115 | A xvi | Exhibits of, at Buffalo..... | 25 | A xv |
| Notes by Selwyn..... | 66, 67 | R C | | | |

| | Page. | Vol. |
|---|----------|------|
| Annuia, Nipissing lake, TIMAGAMI REG., NIP. | | |
| Pyrrhotite on..... | 53 A | xvi |
| Anorthite. | | |
| Definition of..... | 528 | R C |
| India, corundum-bearing..... | 231 | viii |
| Russia, " "..... | 235 | viii |
| Anorthosite. | | |
| Abitibi river..... | 185 | viii |
| Analyses..... | 227 | viii |
| Bad Vermilion river (near)..... | 64 | vi |
| Composition of..... | 234 | vi |
| Georgian bay, islands in..... | 181 | ix |
| Hastings dist., corundum in..... | 206 | viii |
| Ottawa, analysis..... | 226 | viii |
| Parry Sound dist..... | 11 | R C |
| Quebec prov..... | 10, 11 | R C |
| analyses..... | 227 | viii |
| Rawdon, analysis..... | 100 | v |
| Rainy Lake dist., petrography..... | 91, 92 | iv |
| Russia, analysis..... | 226 | viii |
| Seine River dist..... | 63 | v |
| notes and analysis..... | 98-102 | v |
| with granite..... | 91 | vi |
| Shoal lake, E. of Rainy lake..... | 184 | ix |
| South Sherbrooke tp..... | 198 | xi |
| microphoto..... | 216, 217 | viii |
| Tudor tp..... | 198 | ix |
| Anrep, Aleph | | |
| Peat-milling machine of..... | 199 | xii |
| photo..... | 208, 209 | xii |
| Ansbacher A. B. & Co. | 122 | xi |
| Anse a la Mine. See Wright silver mine. | | |
| Anse aux Crepes. See Pancake bay, L. Superior. | | |
| Ansley, A. | 133 A | xiv |
| Anson=Cartwright, R. H. M. | | |
| Manager, Hanson Cross Lake mine..... | 80 A | xv |
| Work by, 1905..... | 40 B | xiv |
| Anstruther tp., PETERBORO CO. | | |
| Molybdenite from..... | 56 | xii |
| Antholite. | | |
| Elzevir tp..... | 193 | ix |
| Anthony, Prof. W. A. | | |
| Ref. to paper by, on magnetic concentrator..... | 340 | xii |
| Blum Gold Mines. | | |
| Capital and date of charter..... | 27 A | xvi |
| Laurentian gold mine owned by..... | 58 A | xvi |
| farm, CAYUGA TP., HALDIMAND CO. | | |
| Gypsum quarry on..... | 122 | R C |
| Reef gold mine. See St. Anthony Reef. | | |
| Anthozon. | | |
| Kwataboahagan river..... | 181 A | xiii |
| Anthracite. | | |
| See also Coal. | | |
| Analysis of standard..... | 184 | i |
| used in Waterworks, Toronto..... | 4 Bull. | ii |
| As a fuel, compared to wood and peat..... | 200 | ii |
| 194, 195..... | xii | |
| Calorific power of..... | 186 | i |
| 166, 168..... | vi | |
| Carbon in, percentage of..... | 219 | vi |

Anthracite.—Cont.

| | Page. | Vol. |
|---|--------------|------|
| Definition of..... | 528 | R C |
| Long island, Lab. (? anthraxolite)..... | 126 | iv |
| Pennsylvania, U. S.: | | |
| analysis..... | 5 Bull. | ii |
| 166..... | vi | |
| fixed carbon in, percentage..... | 163 | vi |
| production, 1888..... | 525 | R C |
| Rhode island, U. S..... | 163, 165 | vi |
| Russia, analysis..... | 166 | vi |
| Wales, analysis..... | 5 Bull. | ii |
| Anthracitic carbon. See Anthraxolite. | | |
| Anthraxolite. | | |
| Balfour tp..... | 152 | vii |
| 124..... | ix | |
| 290..... | xii | |
| 95 c..... | xiv | |
| analysis..... | 96 c | xiv |
| boring for..... | 51 | x |
| comparison with shale of L. of the Woods..... | 104 | vi |
| Composition of, paper by Ellis, 162-166..... | vi | |
| Lake Superior..... | 193 | ii |
| 129..... | vi | |
| Named by Ch pman..... | 129 | vi |
| Notes on..... | 194 | ix |
| Papers on, by Coleman..... | Bull. | ii |
| 159-161..... | vi | |
| Anthropophagy. | | |
| Among Indians..... | 138 | v |
| Anticlinal theory. | | |
| In connexion with gas and oil..... | 115, 148-150 | i |
| Anticline. | | |
| See also Cincinnati arch. | | |
| Balfour tp., in sandstone..... | 97-99 c | xiv |
| Blue lake, Vermilion river, photo..... | 154 | x |
| Chelmsford (near), photo..... | 98 c | xiv |
| Cincinnati, U. S., source of gas..... | 151 | R C |
| French river..... | 67 | i |
| Mississagi river..... | 165 | xii |
| Timagami dist., jaspilite belt..... | 173 | x |
| Anticosti island, QUE. | | |
| Peat on, area of..... | 198 | ii |
| Antifebrin. | | |
| Composition of..... | 33 | v |
| Antimonial silver. | | |
| Silver islet..... | 194 | ix |
| Antimonite. See Stibnite. | | |
| Antimony. | | |
| See also Stibnite. | | |
| Barrie tp..... | 190 | ii |
| Canadian exports, 1881-87..... | 244 | R C |
| Canadian production, 1886-87..... | 243 | R C |
| 1888..... | 525 | R C |
| Coleman tp..... | 100 A | xiii |
| 12 B..... | xiv | |
| Fairy lake, near Echo lake..... | 30 | R C |
| Furnies of, character..... | 449 | R C |
| Garden river..... | 30 | R C |
| Hints on, to prospectors..... | 459 | R C |
| Lake of the Woods..... | 118 | R C |
| Ores of, notes by Goodwin..... | 209 | vi |
| United States production, 1888..... | 525 | R C |
| Value of..... | 209 | vi |
| glance or grey. See Stibnite. | | |
| Antler river. See Atikokan river. | | |

| | Page. | Vol. |
|--|---------------|------|
| Antoine mica mine, DEVIL LAKE, BEDFORD TP., FRONTENAC CO. | 103 A | xv |
| Antrim Iron Co. | 340 | RC |
| Anvil (s). Canadian imports of, 1881-87, 246,249 lake, N. OF LADY EVELYN LAKE, NIP. | 246,249 | RC |
| Cobalt on. | 45 A | xvi |
| Silver on. | 8, 45 A | xvi |
| Anzhekumming (OR UPPER MANI- TOU) lake, R.R.D. Description and geology of. | 62-67 | iv |
| Gold on and near. | 83,84 | vi |
| character of deposits. | 55 A | xvi |
| sluice for, photo. | 117 | vi |
| 112, 113 | 112, 113 | vi |
| <i>See also</i> Gold rock mine Manitou lake dist. Twentieth Century Mg. Co. Victory mine | | |
| Iron ore near. | 136 | xi |
| | 309 | xii |
| Map of district of. | With vol. | iv |
| Notes on, by Coleman. | 52 | y |
| Rocks on and near. | 76, 82, 86-89 | iv |
| 85, 118 | 85, 118 | vi |
| conglomerate. | 184 | ix |
| description. | 153 | vii |
| Couchiching. | 47 | iv |
| Keewatin. | 60, 70 | iv |
| Route from, to L. of the Woods, 87-89 | | vi |
| Trout in. | 44 | iv |
| Aosta river, PIEDMONT COMPARTMENT, ITALY Asbestos in valley of. | 96 | iii |
| Apatite (PHOSPHATES) Association of, with mica. | 86 A | xvi |
| Canadian, paper by Penrose. 436-443 production. <i>See below,</i> Statistics. | 436-443 | RC |
| Corundum mistaken for. | 243 | viii |
| Description of. | 528 | RC |
| Determination of. | 205, 221 | vi |
| Evidence <i>re</i> , before Royal Com. | 68 | RC |
| Exhibits of, at World's Fair. | 189 | ii |
| Florida deposits depress prices. | 238 | i |
| | 3 A | xiii |
| France. | 441 | RC |
| Frontenac co. | 438-441 | RC |
| Bedford tp. | 134 | RC |
| Hinchinbrooke tp. | 228 | viii |
| Loughborough tp. | 149 | RC |
| evidence before Royal Com. 170,171 mining. | 168 | RC |
| with pyroxene. | 53 | RC |
| Grades and prices. | 442 | RC |
| Hardness of. | 448, 535 | RC |
| | 201, 202 | vi |
| | 214 | vii |
| Hastings dist., associated with iron and limestone. | 46 | ii |
| Huronian belt. | 87, 94 | i |
| Industry of, inspector's report on: 1891. | 238-240 | i |
| 1892. | 250-252 | ii |
| 1893. | 194, 195 | iii |
| 1904, reviving. | 86 A | xiv |

2 M.I.

Apatite.—Con.

| | Page. | Vol. |
|---|-------------------------|------|
| Kingston dist., evidence before Royal Com. | 53 167, 170, 177, 402 | RC |
| Lanark co., Bathurst tp. | 137 | RC |
| character of veins. | 440 | RC |
| early mining. | 436 | RC |
| <i>See also</i> N. Burgess tp. | | |
| Leeds co., early mining. | 436 | RC |
| Markets for. | 443 | RC |
| Norway, character of deposits. | 438 | RC |
| eruptive origin. | 443 | RC |
| Occurrences. | 194 | ix |
| Origin of: Bell's views. | 13 | RC |
| Coste's views. | 56 | ii |
| various views. | 443 | RC |
| Parry Sound dist., possibility of. | 94 | i |
| Perth dist., evidence before R. C. | 53, 167, 177, 178 | RC |
| Peru, in guano beds. | 441 | RC |
| Spain and S. Carolina. | 441 | RC |
| Statistics: Canada, 1870,1880. | 209-210 | RC |
| 1881-1887. | 209, 213, 243, 245, 443 | RC |
| 1888. | 75, 525 | RC |
| 1889. | 177 | RC |
| Ontario, 1891. | 6 | i |
| 1892. | 7, 11 | ii |
| 1893. | 7, 10 | iii |
| 1894. | 11, 26-28 | iv |
| U. S., 1887. | 213 | RC |
| 1888. | 525 | RC |
| Works for treating, Smiths Falls. | 169, 179 | RC |
| | 252 | ii |
| Aphis. <i>See</i> Birch, aphis | | |
| Aphrophora <i>See</i> Bugs, spittle | | |
| Ap'John, Frank Joseph Coroner, Kenora. | 238 | v |
| | 67 | vi |
| Notes by, on old Kenora. | 171 | v |
| Apocynum androsaemifolium. Abitibi Lake dist. | 241 A | xiv |
| Mattagami valley. | 150 A | xv |
| " <i>cannabinum.</i> Mattagami valley. | 151 A | xv |
| Apollo Iron and Steel Co. Output of, 1893. | 118 | ii |
| Apophyllite. L. Superior, in copper-bearing rocks. | 131 | vi |
| Spar island. | 194 | ix |
| Apostel lake, W. OF STURGEON LAKE. Th. B. D. Green agglomerate on. | 147 | xi |
| Appalachian mts., U. S. Corundum in. | 242, 247 | viii |
| Apples. Mentioned as growing at: Batchawana bay. | 203 | viii |
| Goulais Bay dist. | 150 | viii |
| Appleby, J. E. | 102 | viii |
| Appleton, E. | 96 | x |
| Apsley, ANSTRUTHER TP., PETERBOR- OUGH CO. Rocks near. | 213, 214 | viii |
| Aptite Jarvis island, L. Superior. | 180 | ix |

| | Page. | Vol. | | Page. | Vol. |
|--|----------|--------|---|----------|--------|
| Apunegacien lake, PART OF STEEP-ROCK LAKE, R. R. D. | | | Argentine Peat Syndicate. | | |
| Notes on, by Blue | 144, 145 | v | Capital and date of charter | 11 | xi |
| Aqueous rocks. | | | Republic. | | |
| Description of, by Miller... | 235, 236 | vi | Nickel coinage in | 161 | ii |
| Formation of, mode..... | 229 | vi | Argentite (SILVER GLANCE). | | |
| Aragonite. | | | Cobalt dist..... | 11, 101 | A xiii |
| Annaberg, Saxony | 61 | B xiv | character | 13 | B xiv |
| L. Superior | 193 | ii | formula..... | 12 | B xiv |
| Mode of occurrence..... | 194 | ix | Composition and description.... | 528 | R C |
| <i>Aralia hispida.</i> | | | | 204, 207 | vi |
| Mattagami valley..... | 150 | A xv | Hardness of..... | 201 | vi |
| " <i>nudicaulis.</i> | | | Hints on, to prospectors..... | 453 | R C |
| Abitibi dist. | 241 | A xiv | Lake Superior: | | |
| Mattagami valley | 150 | A xv | Caldwell pt..... | 149 | ix |
| Arastra. | | | Port Arthur dist. | 191 | ii |
| Description of..... | 528 | R C | Rabbit mt. | 57, 58 | B xiv |
| Arbor Oil Co. | | | Silver islet..... | 86 | v |
| Capital and date of charter | 31 | A xvi | | 52-55 | B xiv |
| Arbour, William | 41 | A xiii | Spar island | 56 | B xiv |
| Archæan system. | | | Mistaken for sylvanite..... | 77 | v |
| Area in Canada..... | 193 | v | Occurrences | 194 | ix |
| | 160 | vii | Saxony | 61 | B xiv |
| Definition of..... | 528 | R C | Schneeberg | 74 | B xiv |
| Divisions of..... | 2, 3 | R C | Specific gravity of..... | 201 | v |
| Distribution of | 6-22 | R C | Mg. and Smelting Co. | | |
| Eastern Canada, notes by Vennor..... | 41-44 | ii | Capital and date of charter | 27 | A xvi |
| Iron ore deposits of, notes by | | | Owning East Silver Mt. mine... | 83 | vii |
| Coleman | 140, 141 | xi | Argento pyrite. | | |
| Occurrences of ores in, views of | | | Joachimsthal, Bohemia | 61 | B xiv |
| Coste | 56-58 | ii | Argillites. | | |
| Ontario, Bell's views..... | 245 | v | Huronian areas..... | 73 | i |
| northern, notes by Gib- | | | Timagami lake, as ornamental | | |
| son..... | 104 | iv | stone..... | 93 | i |
| Nipigon Lake dist., divisions | 110 | A xvi | Argyll gold mine, CLEAR RIVER, L. | | |
| Rainy Lake region, relations of..... | 47, 48 | iv | OF THE WOODS. | | |
| See also Azoic system. | | | Evidence re, before R. C.... | 65, 118 | R C |
| Archelutius co., Col. | | | Arizona Cobalt Silver Co. | | |
| Oil in | 93 | A xiv | Capital and date of charter | 31 | A xvi |
| Archer, George. | 50, 53 | xii | Arkona, BOSANQUET TP., LAMBERTON CO. | | |
| Archibald, John | 46, 48 | xii | Hamilton formation near. | 155 | xii |
| Ardagh, Andrew H. | | | | 69 | B xiii |
| Peat making by, 1899 | 23 | ix | Arkose. See Greywacké. | | |
| E. G. R. | | | Arminius pyrites mine, LOUISA CO. | | |
| Analysis by, of Sudbury rocks.... | 212 | A xiii | Va. | | |
| | 117 | C xiv | Notes on, by W. H. Adams..... | 172 | A xvi |
| Work by, 1905..... | 39-41 | A xv | Armour plate. | | |
| Ardoch, CLARENDON TP., FRONTENAC | | | See also British Admiralty, Nickel- | | |
| Co. | | | steel, etc. | | |
| Gold mining near. See Boerth | | | Nickel for | 176 | i |
| mine. | | | papers on..... | 147-163 | iii |
| Rocks between, and Plevna..... | 203 | xi | by Bell | 179-181 | iv |
| <i>Arenaria granulifera.</i> | | | Jaques. 194-198 | iv | |
| Abitibi dist. | 241 | A xiv | Sperry 185-189 | iv | |
| Arendal, ON THE SKAGERRAK, NOR- | | | used by Gt. Britain .. | 165 | C xiv |
| WAY. | | | Thickness and weight..... | 365 | R C |
| Iron ores of..... | 472 | R C | Titaniferous ores smelted for.... | 231 | vii |
| <i>Arethusa bulbosa.</i> | | | United States, tests on nickel- | | |
| Abitibi dist..... | 241 | A xiv | steel for | 185 | iv |
| Mattagami valley | 150 | A xv | tp., P. S. D. | | |
| Argentan. | | | Brickyard in. See Burks Falls. | | |
| Composition of..... | 159, 160 | ii | Nickel mining in | 286 | xi |
| Nickel for making..... | 155 | ii | Prospecting in, for nickel and | | |
| Argenteuil co., Que. | | | copper..... | 41, 45 | A xiii |
| Limestones of..... | 11 | R C | Arms, W. P. | 102 | vii |
| Gold Mg. and Milling Co. | | | | | |
| Capital and date of charter | 9 | ix | | | |
| Iron mining by, near Jackfish.. | 74 | A xiii | | | |

| | Page. | Vol. | | Page. | Vol. | |
|--|---------------|-------|--|-----------------|---------------|-----------|
| Armstrong, G. | | | Arsenic. | | | |
| Brick making by, Toronto..... | 110 B | xv | <i>See also</i> Mispickel, and Deloro | | | |
| H. | 102 | viii | gold mine. | | | |
| | 115 | ix | Cobalt, Ont. | 31 B | xiv | |
| | 140 | x | | 25 A | xvi | |
| | 73 | xi | analysis | 22 B | xiv | |
| | 65 | xii | not paid for..... | 8 A | xv | |
| Hugh | 56 | viii | production, 1901 | 22 A | xiv | |
| John | 159 A | xiv | | 15, 16 B | xiv | |
| L. O. | 115 | ix | | 9, 23 A | xv | |
| Lord | | | | 1906..... | 10, 11 A | xvi |
| On expert knowledge in manu- | | | with smaltite and nicco- | | | |
| facturing | 486 | R C | lite..... | 23 A | xv | |
| Thomas | 75 | viii | Cornwall, England, methods of | | | |
| | 27, 61 | ix | mining..... | 60, 61 | iii | |
| | 67 A | xiii | Deloro, manufacture of..... | 14, 36 | xii | |
| Nesbitt T. | | | Edward island, L. Superior..... | 86 | v | |
| Acknowledgments to..... | 61 | xi | | 195 | ix | |
| Corundum on land of, Carlow | | | Exhibit of, Louisiana Exhib'n.. | 16 B | xiv | |
|tp..... | 208, 219 | vii | Hardness of..... | 202 | vi | |
| | 242, 244, 246 | viii | In gold ores, Hastings co..... | 72 | R C | |
| | 37 | xii | | 174 | i | |
| worked by Ashland | | | percentage of..... | 237 | iv | |
| Emery Co..... | 99 A | xv | treatment..... | 405 | R C | |
| Owner mica property, near Edg- | | | | 56-61 | iii | |
| ington | 98 | vii | In sperrylite..... | 190 | ii | |
| <i>See also</i> Armstrong mills. | | | Jarvis island, L. Superior..... | 198 | R C | |
| W. J. | 102 | vii | Joachimsthal, Bohemia | 61 B | xiv | |
| | 102 | viii | Ores of, description by Goodwin | 221 | vi | |
| | 140 | x | Paper on, by Wells..... | 101-122 | xi | |
| | 73 | xi | Percentage of, in white..... | 32 B | xiv | |
| | 65 | xii | Photo of refined..... | 112-113 | xi | |
| and Dent. | | | Price, 1898 | 288 | viii | |
| Quarrying by, Credit Forks..... | 99 | i | | 1905 | 15 B | xiv |
| lake, TRILL TP., ALG. | | | Proportion of, in glass..... | 118, 119 | xi | |
| Rocks on and near | 64 C | xiv | Refining plants for..... | 73 B | xiv | |
| Laurentian | 196 A | xiii | Specific gravity of..... | 202 | vi | |
| mill, PAPINEAU CREEK, YORK | | | Statistics, 1885-1901..... | 112 | xi | |
| BRANCH RIVER. | | | | 1886, 1887..... | 210, 243 | R C |
| Limestone at, crystalline | 222 | viii | | 1899..... | 13 | ix |
| fossiliferous | 40 B | xiii | | 12 | x | |
| tp., NIP. | | | | 1900 | 7, 11, 12 | x |
| Blanche river in, course of..... | 36 B | xiv | | 1901 | 8, 12, 13, 29 | xi |
| Arnprior, McNAB TP., RENFREW CO. | | | | 1902 | 12, 13, 36 | xii |
| Brick yard at, notes on..... | 96 B | xv | | 1903 | 2, 4, 18 | Pt i xiii |
| analysis of clay | | | | 1904..... | 1, 3, 22, 73 | Pt i xiv |
| used in..... | 31 B | xv | | 1905..... | 1, 4, 23 | Pt i xv |
| Cambro-Silurian rocks at..... | 38 B | xiii | | 1906..... | 3, 6, 25 A | xv |
| Iron ore near | 137 | R C | Symbol for | 202 | vi | |
| | 141 | xi | Timagami dist..... | 28-31 | R xiv | |
| mining. <i>See</i> McNab iron | | | Use of, in glass colouring..... | 73 B | xiv | |
| mine. | | | Valve of..... | 15 B | xiv | |
| Marble near : | | | Worthington nickel mine..... | 28 | xi | |
| analysis | 105 B | xiii | bloom. <i>See</i> Arsenolite. | | | |
| character..... | 69 | R C | lake, NEAR TIMAGAMI, NIP. | | | |
| | 31 B | xiii | Mispickel mining on..... | 88 A | xv | |
| evidence before R. C..... | 82 | R C | | 73, 74 A | xiv | |
| notes by Merritt | 75 | R C | Arsenical copper. <i>See</i> Domeykite. | | | |
| quarries | 12, 102, | 103 B | iron. <i>See</i> Leucopyrite | | | |
| Marine shells near, altitude..... | 216 | x | nickel. <i>See</i> Niccolite. | | | |
| Arragonite. <i>See</i> Aragonite. | | | pyrites. <i>See</i> Mispickel. | | | |
| Arrow heads. | | | Arsenide of platinum. <i>See</i> Sperry- | | | |
| Made from rocks..... | 83 | i | lite. | | | |
| lake, N. OF L. SUPERIOR, | | | Arsenious acid. | | | |
| TH. B. D. | | | Production, 1888 | 72 | R C | |
| Iron ore on | 70 | ii | Arseniuret of nickel. <i>See</i> Nickeline. | | | |
| prospecting for..... | 20 | xii | | | | |

| | Page. | Vol. | | Page. | Vol. |
|--|---------|-----------|--|-------|---------------|
| Arsenolite. | | | Asbolite. | | |
| Cobalt dist..... | 98 | A xiii | Joachimsthal, Bohemia | 61 | B xiv |
| Marmorata tp. | 195 | ix | New Caledonia | 68 | B xiv |
| Street tp. | 195 | ix | <i>Asclepias incarnata.</i> | | |
| Arsenopyrite. See Mispickel | | | Mattagami valley | 151 | A xv |
| Artemesia gravel. | | | Ascot tp., SHERBROOKE CO., QUE. | | |
| Description and distribution.... | 53 | i | Sulphuric acid works in. See | | |
| Named by Bell | 4 | R C | Capleton. | | |
| Notes on, by Bell | 51 | R C | Ash. | | |
| Artemisia tp., GREY CO. | | | Batchawana valley..... | 200 | viii |
| Artemesia gravel named after ... | 51 | R C | Blanche river | 174, | 183 xii |
| Calcareous tufa in..... | 110 | B xiii | Fort Frances..... | 161 | v |
| Clinton and Niagara formations | | | Hudson Bay slope..... | 121 | iv |
| in | 48, | 49 B xiii | McConkey tp..... | 171 | ix |
| Marl in, analysis..... | 51 | B xiii | Mississagi valley..... | 172 | xii |
| Terrace in. See Flesherton. | | | L. of the Woods, Ash rapid..... | 51 | v |
| Artesian theory. | | | Rainy Lake dist | 96 | iv |
| Demonstration of, as applied to | | | Rainy river..... | 117 | iv |
| gas and soil..... | 154-157 | i | 208 | v | |
| wells, | | | black | | |
| Paper on, by Blue..... | 49-62 | i | Abitibi dist..... | 126 | A xiii |
| Union, Yarmouth tp..... | 128 | ii | 242 | A xiv | |
| See also Water. | | | Frederick House Lake reg..... | 124 | A xiii |
| Arthropycus harlani. | | | Michipicoten div..... | 189 | vii |
| Thorold..... | 116 | B xiii | 295, | 296 | A xiv |
| Arthur, Dr. R. H. | | | Mississagi river | 161 | xii |
| 212 | iv | | Moose River basin | 176 | A xiii |
| 50 | xi | | mountain | | |
| iron mine, CHANDOST TP., PETER- | | | Abitibi dist..... | 126 | A xiii |
| BOURGH CO. | | | 241, | 242 | A xiv |
| 82 | ii | | Michipicoten div..... | 189 | vii |
| Mining Co. | | | 142 | viii | |
| Capital and date of charter..... | 7 | vii | 296 | A xiv | |
| Artikameg Prospecting, Mining | | | Moose River basin | 176 | A xiii |
| and Lumbering Co. | | | rapid, L. OF THE WOODS. | | |
| Capital and date of charter..... | 7 | vii | Flora of | 51 | v |
| Asaphus asperatus | | | Minor ref. to | 106 | vi |
| Anderdon tp. | 125 | xi | Photo of | 46 | A xiv |
| " <i>magister.</i> | | | river, MISSISSAUGI RIVER, ALG. | | |
| Colourne | 40, | 89 B xiii | Lignite on, probability of..... | 174 | A xiii |
| Asbestos. | | | Minor ref. to | 194 | viii |
| Analysis, average | 90 | iii | Ashbridge, J. | | |
| Definition | 528 | R C | Brick making by, Toronto..... | 29 | xii |
| and properties..... | 93-96 | iii | 108 | B xv | |
| Exhibited at World's Fair | 189 | ii | Ashburner, C. A. | | |
| Hardness of | 212 | vi | Notes by, on natural gas...126, 143-146 | i | |
| Huronian belt, possibility of.... | 87 | i | Ashby tp., ADDINGTON CO. | | |
| Italy, notes by Boyd | 96 | iii | Rocks in, along Snow road..... | 225 | viii |
| Marmorata tp | 246 | i | Asher, Alexander. | | 136 i |
| 97 | iii | | Ashfield (NINE-MILE) river, HURON CO. | | |
| Notes, by Goodwin, on various | | | Rocks on..... | 66 | B xiii |
| forms of | 227 | vi | Ashian portage, NETTOGAMI RIVER, | | |
| Occurrences | 97, | 98 | ALG. | | 138 A xiii |
| 195 | ix | | Ashland, ASHLAND CO., WIS. | | |
| Port Arthur dist..... | 192 | R C | Record of Hinkle furnace at.... | 340 | R C |
| Production, Canada, 1886-7 | 243 | R C | Sulphuric acid works at | 184 | A xvi |
| 1888..... | 525 | R C | Emery and Corundum Co. | | |
| 1890..... | 246 | i | Capital and date of charter | 25 | A xiv |
| United States, 1888..... | 525 | R C | Operating, 1905 | 19 | A xv |
| Rainy River dist..... | 50 | iv | 1906 | 21, | 84 A xvi |
| possibility of | 73, | 76 | Plant of, notes and photo..... | 99 | A xv |
| prospecting for | 114 | vii | Previous name of | 19 | A xiv |
| Specific gravity of | 212 | vi | Ashley mica mine, LOUGHBOROUGH | | |
| Thetford., Que., Beaver mine.... | 193 | ii | TP., FRONTENAC CO..... | 91 | A xiii |
| notes on | 246 | i | Ashman, (?) | | 137 C xiv |
| United States..... | 98, | 99 | Ashton, W. F. | | 79, 80 A xiii |
| See also Mountain leather. | | | Asia. | | |
| | | | Copper production of, 1880-87... | 371 | R C |
| | | | Asia Minor. | | |
| | | | Arsenical ores in..... | 102 | xi |

| | Page. | Vol. | | Page. | Vol. |
|---|---------|--------|---|--------|--------|
| Aspdin, Joseph | | | <i>Aster puniceus</i> var. <i>lucidulus</i> . | | |
| Portland cement first made by.. | 118 | A xiv | Abitibi dist. | 241 | A xiv |
| Aspelund, George | 163 | v | " <i>lucidiflorus</i> . | | |
| Aspen , (ASPEN POPLAR; <i>Populus tremuloides</i>). | | | Abitibi dist. | 241 | A xiv |
| Abitibi dist. | 125 | A xiii | <i>Asteria</i> . | | |
| 215, 216, 242 | A xiv | | Ottawa | 224 | x |
| injured by insects. | 129 | A xii | Astor, John Jacob. See Astor Com- | | |
| Frederick House Lake region ... | 124 | A xiii | pany. | | |
| Kenogami valley. | 112 | iv | Company. | | |
| Manitoba and North-west terri- | | | Post of, Pithier pt | 162 | v |
| tories, for building and fuel... 215 | A xiv | | Astorville (late NOSBONSING), FERRIS | | |
| Mattagami valley | 137 | A xv | TP., NIP. | | |
| Michipicoten div. | 295 | A xiv | Apatite crystals near | 94 | i |
| Moose River basin | 176 | A xiii | Astron bay , GRANDE PRESQU'ILE. | | |
| Poreupine Lake dist. | 122 | A xiii | L. OF THE WOODS. | | |
| leaf roller. | | | Notes on, by Coleman. | 115 | vii |
| Abitibi dist. | 129 | A xiii | Rocks from, petrography... 145, | 146 | vii |
| Asphalt. | | | Atagawan river , MISSINAGBI RIVER, | | |
| As street paving, cost per sq. yd. 14 | v | | ALG. | 194 | viii |
| notes by Gibson. | 105, | 106 | 174 | A xiii | |
| Mexico, analysis. | 166 | vi | Atchepemiska lake , ALG. | 130, | 141 |
| Notes by Goodwin | 220 | vi | Ate. | | |
| Asphaltum (BITUMEN). | | | Meaning of, as a termination ... | 447 | R C |
| Lambton co. | 193 | ii | Athabaska Landing , ATHABASKA | | |
| Enniskillen tp. | 195 | ix | RIVER, ALTA. | | |
| United States, production, 1888. 525 | R C | | Oil at, boring for. | 172 | v |
| <i>Aspidium spinulosum</i> var. <i>intermedium</i> . | | | river , ALTA. | | |
| Mattagami valley | 151 | A xv | Tar sands on | 543 | R C |
| <i>Asplenium thelypteroides</i> . | | | Athens , GREECE. | | |
| Abitibi dist. | 242 | A xiv | Mortar used in, by ancient Greeks. 12 | B xii | |
| Mattagami valley | 151 | A xv | Athens , YONGE TP., LEEDS CO. | | |
| Assay office. See Provincial assay | | | Marl in | 121 | A xiv |
| office. | | | <i>Athris clara</i> . | | |
| Assaying and Smelting Co. | | | St. Marys | 151, | 152 |
| Capital and date of charter | 7 | vii | | 96 | B xiii |
| Assays. | | | Walpole tp | 143 | xii |
| Copper ore, Blake tp. | 147 | ix | " <i>cylindrica</i> . | | |
| Galena, Echo lake | 147 | R C | Thorold | 117 | B xiii |
| McTavish tp. | 38 | R C | " <i>maia</i> . | | |
| Iron ore, Little Pic river. | 37 | R C | St. Marys | 151, | 152 |
| Mayo tp. | 261 | xi | | 96 | B xiii |
| Timagami dist. | 180 | x | " <i>spiriferoides</i> . | | |
| Nickel ores, Sudbury dist. | 199 | A xiii | Beachville | 148, | 153 |
| Quartz, Heron bay (near) | 29 | R C | | 92 | B xiii |
| L. of Woods region. | 25, | 115 | Kwataboahegan river | 186 | A xiii |
| Marmora tp. | 28, | 107 | photo of, in lime- | | |
| Partridge lake. | 26 | R C | stone | 192 | A xiii |
| Golden Star mine. | 268-271 | viii | St. Marys | 151 | A xiii |
| Rainy Lake and Seine | | | | 96 | B xiii |
| River dist. | 59, | 60 | Thedford | 154 | xii |
| Wanapitei lake. | 27 | R C | | 69 | B xiii |
| | 92 | i | Atikokan , R.R.D. | | |
| Sand and gravel, Savant lake ... | 90 | xii | Gold mining near. See Elizabeth | | |
| Silver ore, West Silver Mt. mine. 202 | R C | | mine. | | |
| Zincblende, Whitesand river. | 31 | R C | Iron ore near | 88 | i |
| | 177 | i | mining. See Atikokan | | |
| Assumption. See L'Assomption. | | | iron range. | | |
| Aster. | | | Peat near. | 146 | xi |
| Moose River basin | 177 | A xiii | Photo of. | 128, | 129 |
| <i>Aster macrophyllus</i> . | | | creek , ATIKOKAN RIVER, R.R.D. | | |
| Abitibi dist. | 241 | A xiv | Iron mining near. See Iron mt. | | |
| " <i>multiflorus</i> . | | | Gold Development Co. | | |
| Abitibi dist. | 241 | A xiv | Capital and date of charter | 9 | ix |
| " <i>novae-angliae</i> . | | | Iron Co. | | |
| Abitibi dist. | 241 | A xiv | Capital and date of charter | 9 | x |
| " <i>paniculatis</i> . | | | Coal dock of, Port Arthur, photo. 61 | A xv | |
| Abitibi dist. | 241 | A xiv | Smelter of, Port Arthur, proposed. 13 | A xiv | |

| | Page. | Vol. |
|---|-------------------|-------|
| Atikokan iron mine, ATIKOKAN RANGE, R. R. D. | | |
| Notes on, 1905, and photo..... | 59-61 | A XV |
| 1906..... | 60, 61 | A XVI |
| Work at, 1905..... | 47 | A XV |
| iron range, SEINE RIVER DIST. | | |
| Boring in, 1900..... | 25 | xi |
| 1901..... | 58 | xi |
| details..... | 131-133 | xi |
| Deposits in, leased by the Belgian Bank..... | 9, 236 | i |
| | 191 | iii |
| Gold in..... | 58 | iv |
| Mining in, 1899..... | 88 | ix |
| 1901..... | 265, 266 | xi |
| Notes by Blue..... | 210 | v |
| Miller..... | 306 | xii |
| various prospectors..... | 70-76 | ii |
| Ore from, at World's Fair..... | 79-82 | ii |
| character..... | 141 | xi |
| Ore of, quality..... | 191 | ii |
| | 267 | vi |
| in Keewatin formation..... | 30 | B xiv |
| supply undoubted..... | 86 | ii |
| Prospecting in, 1900..... | 35 | x |
| Railway to, from Fort William, projected..... | 133 | v |
| Rocks of, notes by Coleman..... | 164 | ix |
| petrography..... | 145 | xi |
| Smelter for, at Port Arthur..... | 13 | A xiv |
| | 17 | A xvi |
| (or ANTLER) river, SEINE RIVER. | | |
| Description, by Blue..... | 140-144 | v |
| Coleman..... | 72-74 | v |
| Falls on, description..... | 141 | v |
| photo..... | 89 | v |
| Forest fires along..... | 96 | iv |
| Glacial strike on..... | 89 | v |
| Gold mining on. <i>See</i> Hawk Bay gold mine. | | |
| Iron on..... | 144 | R C |
| | 176 | i |
| | 73-75, 123 | iv |
| | 141 | v |
| evidence before R. C..... | 61 | R C |
| magnetite..... | 20, 22 | R C |
| mining..... | 131-133 | xi |
| photo of hills of..... | 80, 81 | v |
| Portages on, ent by Govt..... | 9 | vi |
| Rocks on, Keewatin..... | 59 | iv |
| Waterpower on..... | 259 | vii |
| Atinimikie bay, LAKE OF THE WOODS. | | |
| <i>See</i> Grassy bay. | | |
| Atkins, George J. | 43 | iii |
| Atkinson, D. C. T. | 43 | ix |
| Marble and Granite Co. | | |
| Capital and date of charter..... | 7 | vii |
| Atlanta, FULTON CO., GEORGIA. | | |
| Brick pavements in..... | 108 | iii |
| Atlantic Oil Co. | | |
| Capital and date of charter..... | 27 | A xvi |
| Atlas Arsenic Co. | | |
| Exhibit of, at Pan-American Exhibition..... | 85 | xi |
| Gawley and Pearce mines worked by..... | 104 | xi |
| Plant of, photo..... | 289, 290 | xi |
| Work by, Marmora tp..... | 92 | ix |
| | 116, 117 | x |
| | 15, 197, 233, 244 | xi |
| | 14, 36, 110 | xii |

| | Page. | Vol. |
|--|---------------|--------|
| Atlas gold-arsenic mine, MARMORA TP., HASTINGS CO. | | |
| Cyanide plant at..... | 93 | A xiii |
| Notes on, by Wells..... | 103 | xi |
| Producing, 1903..... | 4 | A xiii |
| Gold Mining and Development Co. | | |
| Capital and date of charter..... | 7 | vii |
| Mining Co. | | |
| Capital and date of charter..... | 9 | ix |
| Atrypa. | | |
| Gore Bay..... | 77 | B xiii |
| <i>intermedia.</i> | | |
| Anderdon tp..... | 125 | xi |
| <i>reticularis.</i> | | |
| Abitibi river..... | 188 | viii |
| Anderdon tp..... | 125 | xi |
| Cayuga tp..... | 146 | xii |
| Kwataboahagan river..... | 186 | A xiii |
| photo..... | 192, 193 | A xiii |
| Hagersville..... | 145 | xii |
| Lake Superior, north shore..... | 156 | viii |
| Port Colborne..... | 35 | xi |
| St. Marys..... | 152 | xii |
| Springvale..... | 144 | xii |
| Stony pt., L. Huron..... | 155 | xii |
| Thedford..... | 154 | xii |
| Thorold..... | 117 | B xiii |
| Woodstock..... | 148 | xii |
| <i>spinosa.</i> | | |
| Anderdon tp..... | 125 | xi |
| Attercliffe, YORKSHIRE, ENGLAND. | | |
| Steel works at..... | 362 | R C |
| Attercliffe, MOULTON TP., HALD- MAND CO. | | |
| Brick-yard at, notes..... | 77 | B XV |
| Natural gas in..... | 91 | A xiv |
| boring for..... | 105, 106 | A xiv |
| pipd to..... | 22 | A xv |
| Station Natural Gas Co. | | |
| Capital and date of charter..... | 7 | vii |
| Attrill salt well, GODERICH | | |
| Depth and thickness of beds..... | 33 | vi |
| Evidence <i>re</i> , before R. C..... | 54 | R C |
| Log of..... | 185 | R C |
| Purity of..... | 189 | R C |
| Attwood, George | | |
| Speech by, <i>re</i> Mond Nickel Co.. | 118 | viii |
| Atwater, A. A. | 51 | ix |
| Atwood and McCaffrey. | 118 | ii |
| Atwood, ELMA TP., PERTH CO. | | |
| Cement at. <i>See</i> Western Ont. | | |
| Portland Cement Co. | | |
| Clay and marl at..... | 162 | A xiv |
| Au Lard river, QUE. <i>See</i> Radnor Forges. | | |
| Aubertot. (?) | | |
| Inventor of hot air blast..... | 321 | R C |
| Aubin, N. | | |
| Peat process of..... | 206 | ii |
| tp., ALG. | | |
| Soil and timber in..... | 121, 136, 141 | A xv |
| Aubinadong (or OBABIKA) river, MISSISSAUGI RIVER, L. HURON. | | |
| Description of and of main river near..... | 162, 165 | xii |

| | Page. | Vol. |
|---|---------------|--------|
| Aubrey (AKIKENDA) falls, MISSISSAGI RIVER, L. HURON. | | |
| Notes on, by Graton | 161 | xii |
| tp., MANITOU LAKE DIST., R. R. D. | | |
| Gold mining in | 95 | x |
| Audette, Frank | 51 | xi |
| J. | 102 | viii |
| Auger, John | 110 | xii |
| Augite. | | |
| Sudbury dist | 195 | ix |
| diorite. | | |
| Port Coldwell, petrography..... | 148 | vii |
| porphyrite. | | |
| Port Coldwell, petrography..... | 149 | vii |
| syenite. | | |
| Abitibi river | 185, 193 | viii |
| L. Superior, N. shore, notes..... | 210-212 | xi |
| Port Coldwell, petrography..... | 147 | vii |
| Augusta silver mine, STRANGE TP., TH. B. D. | | |
| Notes on, 1891 | 228 | i |
| 1892 | 240 | ii |
| tp., GRENVILLE CO. | | |
| Brick-clay in. See Prescott. | | |
| Cambro-Silurian formations in. | 47, 48 | B xiii |
| Auld tp., NIP. | 35 | B xiv |
| <i>Aulocopium.</i> | | |
| Hamilton | 141 | xii |
| <i>Aulopora Serpens.</i> | | |
| N. Cayuga tp | 146 | xii |
| Ault, William | 32, 35 | A xvi |
| Aultsville, OSNABRUCK TP., STORMONT CO. | | |
| Trenton formation near..... | 48, 111 | B xiii |
| Aunger, J. L. | | |
| Iron ore exhibited by, at Chicago. | 82 | ii |
| Notes by, on Blairton iron mine. | 43 | ii |
| Aurora Mining and Development Co. | | |
| Capital and date of charter..... | 7 | vii |
| tp., NIP. | | |
| Granite in | 206, 210 | A xiv |
| Trees and soil in..... | 204, 229, 230 | A xiv |
| Ausable (SABLE) river, L. HURON. | | |
| Copper claims on | 98 | xii |
| Granites northeast of..... | 68 | i |
| Hamilton formation on..... | 155 | xii |
| Limestone near mouth of..... | 37, 50 | B xiii |
| Lumbering on | 119 | iv |
| Section of strata on tributaries of. | 68 | B xiii |
| Waterpower on | 120 | x |
| Austen—? (H. B. C.) | 114 | vii |
| W. C. R. | | |
| Notes by, on mining-schools in U. S. | 417 | R C |
| Austin—? | | |
| Mica mining by, Loughborough tp..... | 90 | A xvi |
| George F. See Austin copper mine. | | |
| Moses | 256 | ii |
| W. A. | 113 | iv |
| bay, TIMAGAMI LAKE, NIP. | | |
| Geology of | 174 | x |
| Mispickel on | 179 | x |
| copper mine, ECHO LAKE, ALG. | | |
| Maps, notes and contour of..... | 91, 92 | R C |
| Australasia. | | |
| Mining laws and regulations of. | 286-296 | R C |

Australia.

| | Page. | Vol. |
|--|----------|--------|
| Boring in, by Govt..... | 55 | x |
| for gold | 164, 165 | iii |
| 233, 234 | | v |
| Cobalt imports of, 1905..... | 73 | B xiv |
| ores in..... | 103 | A xiii |
| Copper production of, 1880-87.... | 371 | R C |
| Financial depression in, 1891.... | 30 | ii |
| Gold in, mode of occurrence..... | 71 | iv |
| reefs, character..... | 66 | R C |
| Mineral industry of, Govt. aid to. | 420 | R C |
| Mining lands in, system of leasing | 8 | i |

Austria.

| | Page. | Vol. |
|-----------------------------|-------|-------|
| Arsenic mining in | 101 | xi |
| Cobalt deposits of | 61-63 | B xiv |
| Mining schools in | 513 | R C |
| Nickel coinage in | 164 | C xiv |
| proposed..... | 145 | ii |
| Peat drying process in..... | 196 | i |

Austria-Hungary.

| | Page. | Vol. |
|-------------------------------------|-------|------|
| Iron and steel production of, 1888. | 224 | R C |
| Mining laws of | 297 | R C |

Auvergne dep., FRANCE.

| | Page. | Vol. |
|-------------------|-------|------|
| Corundum in | 241 | viii |

Aux Sables river. See Ausable river.**Aventurine feldspar.**

| | Page. | Vol. |
|---------------------|-------|------|
| Occurrences of..... | 195 | ix |

Avery, George.

| | Page. | Vol. |
|-------|-------|------|
| ..... | 47 | x |
| 39 | | A xv |

Aracula.

| | Page. | Vol. |
|---------------------------|-------|--------|
| Gore Bay..... | 77 | B xiii |
| " <i>testilis</i> . | | |
| Abitibi river..... | 188 | A xiii |
| Kwataboahagan river | 188 | A xiii |

Aiculopecten princeps.

| | Page. | Vol. |
|----------------|-------|--------|
| St. Marys..... | 152 | xii |
| 96 | | B xiii |

Avoca valley, WICKLOW CO., IRELAND.

| | Page. | Vol. |
|------------------|-------|-------|
| Pyrites in | 192 | A xvi |

Avon gold mine, SHAKESPEARE TP., ALG.

| | Page. | Vol. |
|---------------------|-------|-------|
| Notes on, 1904..... | 58 | A xiv |

Avonmore, ROXBOROUGH TP., STORMONT CO.

| | Page. | Vol. |
|---------------------------|-------|------|
| Marine deposits near..... | 218 | x |

Awaruite.

| | Page. | Vol. |
|--------------------------|-------|-------|
| George river, N. Z. | 151 | C xiv |

Awerees sta., MICHIGICOTEN DIV., ALG.

| | Page. | Vol. |
|------------------|-------|------|
| Terrace at | 199 | A xv |

Awrey, Nicholas

| | Page. | Vol. |
|-------|-------|------|
| ..... | 190 | iii |

Axe-handle portage, NETTOGAMI RIVER, ALG.

| | Page. | Vol. |
|-------|-------|--------|
| ..... | 138 | A xiii |

Axinite.

| | Page. | Vol. |
|-------------------|-------|------|
| Prescott co | 193 | ii |

Aylmer, H. B.

| | Page. | Vol. |
|--------|-------|------|
| ..... | 122 | vii |
| 42, 75 | | viii |

Aylmer, MALAHIDE TP., ELGIN CO.

| | Page. | Vol. |
|--------------------|-------|------|
| Brick-yard at..... | 62 | B xv |

| | Page. | Vol. |
|------------------|-------|-------|
| Oil well in..... | 109 | A xiv |

Aylmer, OTTAWA CO., QUE.

| | Page. | Vol. |
|-------------------------|-------|--------|
| Cambro-Silurian at..... | 38 | B xiii |

| | Page. | Vol. |
|----------------------------|-------|------|
| pt., L. OF THE WOODS | 186 | v |

| | Page. | Vol. |
|--------------------------------------|-------|------|
| Aylsworth tp., R. R. D. | 167 | v |

Ayr, N. DUMFRIES TP., WATERLOO CO.

| | Page. | Vol. |
|--------------------------------|-------|------|
| Country around, character..... | 149 | xii |

| | Page. | Vol. |
|-----|-------|--------|
| 115 | | B xiii |

| | Page. | Vol. |
|--|----------|------|
| Azilda, RAYSIDE TP., ALG. | | |
| Agricultural land near..... | 241 | xii |
| 104, 105 c | xiv | |
| Minor refs. to..... | 200 A | xiii |
| 69 c | xiv | |
| Rocks near, nickel-bearing..... | | |
| 5, 39, 54, 55, 62 c | xiv | |
| norite..... | 293 | xii |
| sandstone..... | 100 c | xiv |
| section..... | 204 A | xiii |
| Terrace at, altitude..... | 103 c | xiv |
| Azoic system. | | |
| Definition of..... | 529 | R C |
| Occurrences, etc. <i>See</i> Archean. | | |
| Azurite (BLUE CARBONATE OF COPPER). | | |
| Batchawana bay..... | 193 | ii |
| Bisbee, Arizona..... | 212 | vi |
| Determination of..... | 204, 212 | vi |
| Hardness of..... | 202 | vi |
| Lakes Huron and Superior..... | 195 | ix |
| Port Arthur dist..... | 58 B | xiv |
| Princes location..... | 193 | ii |
| Prospecting for, hints on..... | 457 | R C |
| Specific gravity of..... | 202 | vi |
| B. A. Pyrites Co. | | |
| Exhibits of, at Buffalo..... | 25 A | xv |
| Babbitt metal. | | |
| Arsenic for hardening..... | 114, 117 | xi |
| Babcock, John | | |
| Evidence by, before R.C., <i>re</i> — | | |
| prospectors..... | 311, 426 | R C |
| Sudbury dist..... | 105 | R C |
| Nickel prospecting by, Levack tp..... | 233 | i |
| Purchaser of Beatrice mine..... | 190 | iii |
| and Wilcox. | | |
| Boiler output of, 1893..... | 119 | ii |
| gold mine, PORTLAND TP., | | |
| FRONTENAC CO. | | |
| Auriferous mispickel in..... | 203 | xi |
| Babel, Tower of | | |
| 166 | i | |
| 107 | iii | |
| Baboon falls, MISSISSAUGI RIVER, ALG. | | |
| Photo..... | 136, 137 | viii |
| Baby, William W. | | |
| 127 | iii | |
| 124 | vii | |
| mica mine, N. BURGESS TP., | | |
| LANARK CO. | | |
| Notes on, 1895..... | 278, 279 | v |
| Re-opening of, suggested..... | 132 | x |
| 1904..... | 85 A | xiv |
| Worked by Richardson Bros..... | 103 A | xv |
| Babylon, EUPHRATES RIVER, ASIA. | | |
| Notes on, by Hilprecht..... | 166 | i |
| Bachewanaung. <i>See</i> Batchawana. | | |
| Bacon, B. T. | | |
| 115 | ix | |
| 140 | x | |
| 73 | xi | |
| Evidence by, before R.C..... | 125 | R C |
| McKellar-Graham iron claim ex- | | |
| amined by..... | 72, 73 | ii |
| Backus farm, DEXWICH TP., ELGIN | | |
| CO. | | |
| Oil production of, 1898..... | 16 | viii |
| syndicate. | | |
| Water power developed by, at | | |
| Fort Frances..... | 14 A | xv |
| Bad Creek corundum mine, N. | | |
| CAROLINA | | |
| 225 | vii | |

| | Page. | Vol. |
|--|----------|------|
| Bad gold mine, NEAR ROSSLAND, | | |
| ONT. | | |
| Depth of, 1900..... | 35 | ix |
| Geology of..... | 69 | iv |
| Notes of..... | 30, 31 | iii |
| 56 | viii | |
| 38 | ix | |
| 83 | iii | |
| river, L. SUPERIOR, U.S. | | |
| river, WINDERMERE LAKE, ALG. | | |
| Mica and tale schists on..... | 204 | viii |
| Notes on, by Charlton..... | 201 | viii |
| Vermilion bay, BAD VERMI- | | |
| LION LAKE, SEINE RIVER. | | |
| Gold mining on. <i>See</i> Hillyer | | |
| gold mine. | | |
| creek, BAD VERMI- | | |
| LION LAKE, SEINE RIVER. | | |
| 63, 65 | v | |
| Gold Mg. Co. | | |
| Capital and date of charter..... | 9 | viii |
| lake, SEINE RIVER. | | |
| Erythrite on..... | 74 | iv |
| 198 | ix | |
| 60 B | xiv | |
| Fissure veins S. of..... | 52, 53 | iv |
| Gold mining on. (<i>See also</i> Golden | | |
| Star mine)..... | 5 Bull. | i |
| 230 | iv | |
| 82 | vi | |
| 74 | vii | |
| 45 | viii | |
| Notes by Coleman..... | 55-58 | iv |
| 63-67 | v | |
| Map of part of..... | 293 | viii |
| Rocks on and near..... | 272 A | xiv |
| anorthosite, notes and analysis | | |
| 98-102 | v | |
| gabbro..... | 49 | iv |
| granite..... | 79, 80 | iv |
| 103 | v | |
| junction with Keewatin, | | |
| photo..... | 64, 65 | vi |
| petrography..... | 96, 97 | v |
| Keewatin formation..... | 50 | iv |
| porphyrites..... | 91 | iv |
| Surveys on, by Coleman, ref. to..... | 40 | iv |
| Tront in..... | 63 | v |
| river, BAD VERMI- | | |
| LION LAKE, R. R. D. | | |
| Rocks on, anorthosite..... | 92 | iv |
| granite..... | 90 | iv |
| Baden-Powell gold mine, EAGLE | | |
| LAKE, MANITOU LAKE DIST. | | |
| Minor ref. to..... | 49 | xii |
| Notes on, 1900..... | 96 | x |
| 1901..... | 244 | xi |
| 1902..... | 93 | xii |
| 1904..... | 48 A | xiv |
| 1905..... | 54 A | xv |
| Operating, 1906..... | 59 A | xvi |
| Option given on, 1901..... | 244 | xi |
| Photo of..... | 96, 97 A | xiii |
| Mining Co. | | |
| 43 A | xvi | |
| Badgely, John | | |
| 32 | viii | |
| Badger silver mine, GILLIES TP., | | |
| TH. B. D. | | |
| Acquired by Consolidated Mines | | |
| Co..... | 19, 256 | xi |
| 96 | xii | |
| Animikie formation in..... | 35 | R C |

| | Page. | Vol. | | Page. | Vol. |
|---|------------------|------|---|------------|------|
| Badger silver mine. — <i>Con.</i> | | | Bailey, R. E. | | |
| Course of veins in..... | 62, 198, 203 | R C | Evidence by, before R. C. <i>re</i> :— | | |
| Evidence <i>re</i> , before R. C. | 63, 198-200, 208 | R C | Galena, Garden river..... | 203 | R C |
| Inspector's report on, 1891 | 226, 227 | i | iron near Echo lake..... | 143 | R C |
| 1892..... | 239 | ii | mining plants..... | 396 | R C |
| Notes by Merritt: section | 193 | R C | minerals, Goulais Bay dist..... | 60 | R C |
| Re-opened, 1897 | 83 | vii | prospectors | 308 | R C |
| Silver in, native | 207 | vi | tariffs | 231 | R C |
| Stephanite in | 210 | ix | Minor reference to | 64 | ii |
| Working of, unprofitable | 177 | i | Mining Co. | | |
| Mining Co. | | | Capital and date of charter | 29 A | xiv |
| Capital and date of charter | 7 | vii | Bain, J. Watson | | |
| Badische Anilin und Soda Fabrik. | | | Analysis by, of Sudbury matte.. | 152 c | xiv |
| Pyrites smelting by | 195 A | xvi | Notes by, on:— | | |
| Badoureaux, A. | | | Golden Star mine..... | 77, 78 | viii |
| Ref. to memoirs by, on nickel | | | mines in western Ont. | 275-279 | viii |
| ores | 156 | ii | Report by, on:— | | |
| Baffin island, FRANKLIN. | | | Iron belt of L. Nipigon | 212-214 | x |
| Archaean rocks on..... | 7 | R C | ref. to..... | 310 | xii |
| 104 | iv | | 15 A | xv | |
| 245 | v | | Nickel industry, 1898 | 213-224 | ix |
| Mountains of, strike..... | 248 | v | School of Practical Science | | |
| (1897) | | | (1897) | 264, 265 | vii |
| Bag bay, SHOAL LAKE, W. OF LAKE | | | Summer Mining Classes (1898) | | |
| OF THE WOODS. | | | 280-282 | viii | |
| Gold on, boring for | 67 | viii | Work by, 1900..... | 5 | x |
| 52 | x | | 105, 127 A | xvi | |
| notes by Coleman.. | 49, 50 | v | 1902 | 3, 54, 55 | xii |
| <i>See also</i> Cornucopia mine. | | | 1904..... | 37, 41 A | xiv |
| Mikado mine. | | | 1906..... | 49 A | xvi |
| Granite on, notes by Coleman .. | 103 | v | Bain, W. | 140 | x |
| Map of | Facing 64 | viii | 73 | xi | |
| <i>See also</i> Shoal lake | | | Baine Mining and Exploration Co. | | |
| Gold Mines Co. | | | Capital and date of charter..... | 9 | ix |
| Capital and date of charter..... | 9 | x | Baird, H. J. B. | | |
| Bagdad, ASIATIC TURKEY | 166 | i | Manager for Canadian Copper Co. | 84 A | xiii |
| Bagot tp., RENFREW CO. | | | Resignation of | 69 A | xiv |
| Bourmonite in | 195 | ix | Statement by, <i>re</i> water-jacketed | | |
| Clinocllore in, analysis | 196 | ix | furnaces | 83 A | xiii |
| Iron in, exhibited at World's | | | J. E. | 102 | viii |
| Fair..... | 79 | ii | U. | 118 | ii |
| Magnetite in | 202 | ix | Bros. (SCOTLAND). | 361 | R C |
| mining | 275 | v | H. C. and Son. | | |
| notes by Campbell .. | 136 | R C | Brick-yard of, Parkhill | 75, 80 B | xv |
| Merritt | 128 | R C | Mining Co. | | |
| <i>See also</i> Calabogie .. | | | Capital and date of charter..... | 9 | x |
| Limestone in | 101 B | xiii | Baker, Alexander | 64 | R C |
| Tremolite in | 211 | ix | 123 | iv | |
| Baie des Peres (VILLE MARIE), TIM- | | | 87 | vi | |
| ISKAMING LAKE, QUE., | | | C. L. | 255 | xi |
| Geology of vicinity..... | 174 | ix | Dr. | 32 | xi |
| Rocks near | 102 A | xiii | J. N. | 238 | ii |
| 46 B | xiv | | Col. James | | |
| Striae at, direction | 178 | ix | Speech by, <i>re</i> Mond nickel pro- | | |
| Terraces near, altitude | 178 | ix | cess | 117 | viii |
| Fine. <i>See</i> Narrow bay, Geor- | | | M. B. | | |
| gian bay. | | | Acknowledgments to..... | 189 | xii |
| St. Paul. <i>See</i> Bay St. Paul. | | | Greenstone from Bucke tp. ex- | | |
| Baikie, D. | 68 | vi | amined by. | 42 B | xiv |
| Baiksky mts., NOVGOROD DIV., RUS- | | | Report by, on clay and clay in- | | |
| SIA | 213 | vii | dustry..... | Pt. B | xv |
| Bailey, C. W. | 102, 195 | vii | ref. to | 47 A | xvi |
| J. C. | | | Surveys by, Abitibi dist. | 205, 208 A | xiv |
| Evidence by, before R. C. | 57 | R C | Baker, William | | |
| Ref. to surveys by, N. of North | | | Brick yard of, Arnprior | 96 B | xv |
| Bay | 105 | iv | clay for, analysis | 31 B | xv |
| L. W. | | | Bros. | | |
| Ref. to report by, on time indus- | | | Brick yard of, Casselman, notes. | 98, | 99 B |
| try of N.B. | 10 B | xiii | producing | 29 | xii |

| | Page. | Vol. |
|--|--|------|
| Baker iron mine, HASTINGS DIST. | | |
| Rocks of | 57 | ii |
| Baking powder. | | |
| Iron pyrites for making | 257 | v |
| Bakka, Jesta. | 54 | xi |
| Baku oil field, RUSSIA. | 115 | i |
| "Balance of Trade." | | |
| Gt. Britain, France and Belgium, statistics, 1868-1886. | 397 | R C |
| Balanus crinatus. | | |
| Nepean tp. | 216, 224 | x |
| <i>hameri.</i> | | |
| Nepean tp. | 224 | x |
| <i>mysticetus.</i> See Whale. | | |
| Balbach and Son. | | |
| Huronian gold mine ores treated by | 124 | v |
| Smelting by, of Thunder Bay dist. ores | 63 | R C |
| See also next refs. | | |
| Smelting and Refining Co. | | |
| Cobalt ores purchased by. | 11 A | xvi |
| Nickel refining by, method. | 221 | ix |
| Bald Indian bay, LAKE OF THE WOODS. | | |
| Gold mining on. See also Barley mine. | | |
| Map of | 64, 65 | viii |
| Mining and Investment Co. | | |
| Capital and date of charter | 7 | vii |
| mt., HUNGERFORD TP., HAST- INGS CO. | | |
| Rocks of | 157 A | xvi |
| Balderson, DRUMMOND TP., LANARK CO. | | |
| Limestone at. | 46 | ii |
| Baldwin, HABERSHAM CO., GA. | | |
| Analysis of clay from. | 160 A | xiii |
| Baldwin, GEORGINA TP., YORK CO. | | |
| Limestone near | 126 B | xiii |
| tp., ALG. | | |
| Rocks in, clay-slates. | 73 | i |
| crystalline schists | 80 | i |
| Baleo, CAL. | | |
| Cobalt in smithsonite in. | 71 B | xiv |
| Balfour gold mine, BALFOUR TP., ALG. | | |
| Notes on, 1892. | 236 | ii |
| tp., ALG. | | |
| Anthraxolite in | 159, 160 | vi |
| analysis. | 152 vii 124 ix 290 xii 95 c xiv | |
| Bull. ii. | 162-164 | vi |
| boring for. | 194 ix 96 c xiv | |
| compared with carbon- aceous shale, L. of Woods | 51 | x |
| specific gravity. | 104 | vi |
| Gold mining in | 165 | vi |
| Graphite in | 236 | ii |
| Sandstone in | 168 | x |
| See also Larchwood. | 206, 207 A | xiii |

| | Page. | Vol. |
|--|----------------------|------|
| Balfour tp.—Con. | | |
| Zinc-blende in. | 209 | ix |
| mining | 33 | viii |
| See also Chelmsford. | | |
| Ball, C. M. | | |
| See Ball-Norton Separator. | | |
| Dick | 177 | vii |
| H. G. | 46 | x |
| =Norton Separator. | 102 | vii |
| Description | 326, 327 | xii |
| Notes on, and diagram. | 130, 131 A | xiv |
| by inventor. | 339 | xii |
| Ballantyne, A. | | |
| Lime producing by, 1902 | 28 | xii |
| Joseph Arthur | | |
| On quality of Canadian salt. | 191 | R C |
| R. M. | | |
| Invalided home, 1848 | 173 | ii |
| Notes by, on:— | | |
| Lake of the Woods. | 167 | v |
| Rainy river | 207, 208 | v |
| travelling in New Ontario, 1845. | 200 | v |
| station, PITTSBURG TP., FRON- TENAC CO. | 221 | x |
| Ballarat, VICTORIA, AUSTRALIA. | | |
| School of mines at | 521 | R C |
| Mining Co. | | |
| Capital and date of charter. | 24 A | xiii |
| Ballast. | | |
| Iroquis Beach gravels for | 238 A | xiii |
| Balm of Gilead (POPLAR, ROUGH- BARKED) | | |
| Abitibi dist. | 124-126 A | xiii |
| 221, 225, 228-233, 250, 251 A | | xiv |
| Black river | 188 | xii |
| diameter | 199 A | xiv |
| 125 A | | xv |
| Blanche river. | 215 | xi |
| Eby tp. | 179, 180 | xii |
| Mattagami valley. | 122, 123 A | xiii |
| 188, 189 A | | xiv |
| 118-121, 144, 145 A | | xv |
| diameter. | 127, 137-143, 152 A | xv |
| Michipicoten div. | 189 | vii |
| Rainy river. | 117 | iv |
| leaf=gall. | | |
| Frederick House lake | 129 A | xiii |
| Balsam, | | |
| Abitibi dist. | 107, 124-126 A | xiii |
| 214, 215, 224-235, 249-251 A | | xiv |
| 125, 126 A | | xv |
| river | 178 | viii |
| Black river | 186, 188 | xii |
| damaged by storms. | 199 A | xiv |
| Blanche River region. | 174, 178-182 | xii |
| Fourth base line | 181 | vii |
| L. Huron slope. | 170 | vi |
| L. Superior, east of, Speight's meridian line. | 199-202 | viii |
| Matawin river | 132 | v |
| Mattagami valley | 105, 106, 122, 123 A | xiii |
| 188, 193, 195, 221 A | | xiv |
| 118-123, 136-140, 144 A | | xv |
| diameter. | 137, 141-145, 152 A | xv |
| Michipicoten div. | 189, 206 | vii |
| 295 A | | xiv |
| 13 Bull. | | iii |
| Mississagi valley. | 159, 172 | xii |

| | Page. | Vol. |
|---|---------|--------|
| Balsam. — <i>Con.</i> | | |
| Moose River basin | 176 | A xiii |
| Nipigon Lake dist. | 138 | A xvi |
| Rainy river. | 117 | iv |
| Seine river. | 150-153 | v |
| Timagami Lake region | 57 | R C |
| fir. See Fir, balsam | | |
| poplar. See Poplar, balsam | | |
| lake, VICTORIA CO. | | |
| <i>See also</i> Trent Valley Peat Fuel Co. | | |
| Limestone on | 97 | B xiii |
| Trenton | 113 | B xiii |
| Peat on | 21 | ix |
| Baltimore, MARYLAND, U.S. | | |
| Blast furnaces at, character of | | |
| ores for | 400 | R C |
| reasons for location | 127 | ii |
| Iroquois beach at | 230 | A xiii |
| and Ohio Ry. | | |
| Steel tires of, quality | 192 | iv |
| Baluss, Hamilton | | |
| Gold mining by, near Wawa. 102. | 194 | vii |
| | 102 | viii |
| Bancroft, FARADAY TP., HASTINGS CO. | | |
| Iron smelting at, proposed | 234 | vii |
| Mining class at, 1897 | 260 | vii |
| Position of | 216 | viii |
| Quarrying near, granite | 107 | A xv |
| marble | 107 | A xv |
| sodalite | 82 | A xvi |
| sodalite | 106 | A xv |
| sodalite | 26 | A xvi |
| Svenite at | 216-218 | viii |
| Zircon near | 212 | ix |
| Iron Co. | | |
| Capital and date of charter | 7 | vii |
| Work by, Bancroft dist. | 61 | ii |
| Banded Purple (BUTTERFLY). | | |
| Abitibi dist | 129 | A xiii |
| Bangor, VAN BUREN CO., MICH. | | |
| Record of iron furnace at | 339 | R C |
| tp., HASTINGS CO. | | |
| Corundum in, notes by Miller .. | 226 | vii |
| Bangs, F. C. | 14 | v |
| Banks, J. H. See Ricketts and Banks. | | |
| J. Lisney | 84 | xi |
| Banksian pine. See Pine, Banksian | | |
| Banner Cobalt Mg. Co. | | |
| Capital and date of charter | 27 | A xvi |
| Oil Co. | | |
| Exhibits of, at Buffalo. | 25 | A xv |
| Bannerman, A. | 102 | vii |
| lake, MONCRIEFF TP., ALG., | | |
| Rocks on and near | 154 | x |
| clay-slates | 73 | i |
| Bannockburn, MADOC TP., HASTINGS CO. | | |
| Copper near, prospecting for, ad- | | |
| visable | 42 | A xv |
| Galena mining near | 32, | 288 |
| | 94 | A xiii |
| | 16 | A xv |
| smelter | 91 | A xv |
| | 18, | 78 |
| | 92 | A xvi |
| photo | 92 | A xv |
| <i>See also</i> Hollandia lead mine. | | |
| Gold mining near | 264 | v |
| <i>See also</i> Bannockburn mine. | | |

| | Page. | Vol. |
|---|---------|--------|
| Bannockburn. — <i>Con.</i> | | |
| Iron pyrites mining near. | 19, | 39 |
| for sulphuric acid .. | 21 | A xvi |
| Notes and photos. | 154-157 | A xvi |
| by Miller | 199 | xi |
| <i>See also</i> Jarman pyrites mine. | | |
| gold and pyrites mine, BAN- | | |
| NOCKBURN. | | |
| Accident at | 33, | 35 |
| Mining class at | 42 | A xv |
| Notes on, 1895 | 264, | 265 |
| 1898 | 89, | 90 |
| by Miller | 199 | xi |
| Origin of deposits | 182 | A xvi |
| Production, 1901 | 201 | A xvi |
| Shaft of, direction | 187 | A xvi |
| Gold Mg. Co. | | |
| Capital and date of charter. | 7 | vii |
| Baptiste (INDIAN) | 112, | 117 |
| lake, MONTREAL RIVER, NIP. | | |
| Dolerites near | 116, | 117 |
| Notes on, by Kelly | 112, | 113 |
| Bar lake. See Baril lake. | | |
| Baraga, Frederic. | 138 | v |
| Barb, E. HAWKESBURY TP., PRESCOTT CO. | | |
| Limestone near | 98 | B xiii |
| Barba —? | 149 | iii |
| Barber, Dr. | 172 | ix |
| tp., NIP. | 35 | B xiv |
| Barboux, Peter | 171, | 172 |
| Barclay,—? | 91 | A xv |
| Barclay, R. C. | 41, | 60 |
| Barclay, R. R. D. | | |
| Dairy farm near | 118 | iv |
| Bare pt., L. OF THE WOODS. | 13 | iii |
| | 173 | v |
| Barebone island, ABITIBI RIVER. | | |
| Peaty clay on | 188 | viii |
| Baril bay, LAC DES MILLE LACS, TH. B. D. | | |
| Route to, from Savant, descrip- | | |
| tion | 135 | v |
| Timber on | 136 | v |
| lake, NEAR LAC DES MILLE LACS, TH. B. D. | | |
| Beauty of | 203 | v |
| Forest fires near | 96 | iv |
| Notes on, by Blue | 136 | v |
| Rocks on, Laurentian | 73 | v |
| portage, BARIL LAKE, TH. B. D. | | |
| Minor ref. to | 136 | v |
| Road from, to Huronian mine .. | 121 | v |
| Trees south of | 78 | v |
| Barite. See Barytes. | | |
| Barium carbonate. See Witherite. | | |
| sulphate. See Barytes. | | |
| Barker, C. R. | 35 | B xiii |
| Bros. | | |
| Gold mining by, Manitou lake. 27, | 76 | viii |
| | 63 | ix |
| farm, THUNDER LAKE, ZEA- | | |
| LAND TP., R. R. D. | 27, | 76 |
| | 63 | ix |
| Iron at | 136 | xi |
| Barkevig, NORWAY. | | |
| Nepheline-syenite of, ref. to | 209 | xi |

| | Page. | Vol. | | Page. | Vol. |
|---|----------|------|---|-----------|------------------|
| Barley. | | | Barnham, B. | 140 | x |
| Mentioned as growing at | | | Barnhart, W. H. | 93 | xii |
| Ground-hog lake | 114 | iv | | 49 A | xiv |
| James bay | 107 | iv | island, St. LAWRENCE RIVER. | | |
| Long Lake House | 112 | iv | Chazy limestone opposite | 47, 111 B | xiii |
| Rainy River dist. | 65 | R C | Barnhisel, J. C. | 102 | vii |
| Barlow, Dr. Alfred E. | | | Barnsley, YORKSHIRE, ENGLAND. | | |
| Acknowledgments to | 169 | vi | Coal in, royalty on | 25 | i |
| Altitude of L. Timiskaming de- | | | Barnum, H. | 102 | vii |
| termined by | 177 | ix | Barr, Henry | 440, 441 | R ^c C |
| Description by, of limestone, | | | =Andlau, ALSACE, GERMANY. | | |
| Nipissing Lake region | 81-84 B | xiii | Rock at, compared with rock in | | |
| Estimate by, of Sudbury mineral | 156 C | xiv | Rainy Lake dist. | 82 | iv |
| Extract from report by, on nickel | | | Barrel lake. | | |
| deposits of Sudbury | 242 | xii | Barrette (BURRITT) lake, METHUEN | | |
| Photo of | 139 C | xiv | TP., PETERBORO' CO. | 214 | viii |
| Tests by, on Sudbury ores | 282 | xii | Barrie, VESPRE TP., SIMCOE CO. | | |
| Views of, concerning rocks of:— | | | Algonquin beach at, altitude of | 152 | viii |
| Algoma—Nipissing line | 183 | vi | Artesian wells in | 58 | i |
| Sudbury dist. | 276 | xii | Brick-yard in, notes | 99 E | xv |
| Wanapitei dist. | Pt. C | xiv | Peat-bog near | 23 | ix |
| With British Association visitors, | | | island, L. HURON, ONT. | | |
| 1897 | 145 | vii | Limestone on | 77 B | xiii |
| Work by, Hastings dist., ref. to | | | silver mine, BARRIE TP., FRON- | | |
| | 208, 227 | vii | TENAC CO. | 203 | xi |
| | 245 | viii | tp., FRONTENAC CO. | | |
| Sudbury dist., ref. to | 235 | xii | Antimony from, specimen | 190 | ii |
| | 194 A | xiii | Bismuth in | 77 A | xiv |
| | 11 B | xiv | Bismuthinite in | 204 | vi |
| Throughout | pt. C | xiv | | 234 | vii |
| Timagami dist., ref. to | 185 | ix | | 195 | ix |
| | 160-164 | x | | 77 A | xiv |
| | 102 A | xiii | Columbite from | 191 | ii |
| | 46 B | xiv | Field prospecting in | 213, 218 | v |
| Samuel | | | Galena in | 198 | ix |
| Iron smelting by, Lyndhurst (1813) | 319 | R C | auriferous | 209 | ix |
| Col. W. W. | 143 | ii | Gold mining in, 1902 | 112 | xii |
| Barnard, Dr. E. E. | 67 | iii | 1903 | 93 A | xiii |
| K. T. | | | <i>See also</i> Helena mine. | | |
| Assayer, St. Anthony Reef Gold | | | Star of the East mine. | | |
| mine | 82 | xii | prospecting in | 90 A | xv |
| W. H. | | | Iron ore in | 61 | ii |
| Brick-making by, Monkton | 94 B | xv | Jamesonite in | 209 | vi |
| =Argue-Roth-Stearns Oil and | | | Marble of, analysis | 45 B | xiii |
| Gas Co. | | | character | 31 B | xiii |
| Capital and date of charter | 27 A | xvi | | 80 | R C |
| Work by, Romney tp | 100 A | xvi | evidence before R. C. | 69 | R C |
| Barnes, Alfred | | | quality | 220 | v |
| Evidence by, re royalties in Great | | | Meneghinite in | 208 | vi |
| Britain | 27 | i | Mispickel in | 205 | ix |
| E. B. | 26 | iii | Rocks in, conglomerate | 200 | xi |
| E. W. | 57 | vii | dikes in basic | 219 | v |
| James | | | diorite | 200 | xi |
| Evidence by, re royalties in Wales | 36 | i | limestone cut by calcite | 206 | xi |
| Thomas | | | <i>See also above, Marble.</i> | | |
| Iron mining by, Algoma Mills | 25 | vii | mica-schists | 101 B | xiii |
| Cook mine | 31 | viii | notes by Miller | 202, 203 | xi |
| Dufferin mine | 128 | x | Stibnite in | 210 | ix |
| Robertsville mine | 104 | ix | Tetrahedrite in | 208 | vi |
| | 128 | x | Zinc-blende in | 209 | ix |
| oil-wells, ENNIS-KILLEN TP., | | | Barrie field common, KINGSTON. | | |
| LAMBTON CO. | | | Celestite on | 196 | ix |
| Daily yield of | 26 | v | Leucoxene on | 201 | ix |
| quarry, RYMAL, WENTWORTH | | | Section of, showing effect of ero- | | |
| CO. | | | sive action | 231 | vi |
| Quality of stone from | 126 B | xiii | Barron, John A. | | |
| Barnet quarry, BRAESIDE, RENFREW | | | Evidence by, before R. C. | 237, 396 | R C |
| CO. | | | Brick Co. | | |
| Analysis of stone from | 105 B | xiii | Capital and date of charter | 29 A | xvi |

| | Page. | Vol. | | Page. | Vol. |
|---|-------------------|------|--|--------------|------|
| Barron location , GOULD TP., ALG. | | | Basalt . | | |
| Chalcocite in..... | 196 | ix | Colorado, analysis..... | 173 | viii |
| Barrow , LANCASHIRE, ENGLAND. | | | Cross lake, Coleman tp..... | 40 B | xiv |
| Apatite shipments to, 1884-1885. | 443 | R C | analysis..... | 50, 51 B | xiv |
| Barry, J. W. | | | Description of..... | 529 R C, 235 | vi |
| Silver mining by, Paipoonge tp. | 229 | i | L. Superior..... | 62 | iii |
| Bay , SHERWOOD TP., REXFREW CO. | | | <i>Basilarchia arthemis</i> . See Banded Purple. | | |
| Railway from, to Detlor, suggested..... | 78 A | xiv | Basin, The , COLORADO. | | |
| Stratified deposits near, altitude. | 223 | x | Analcite basalt from, analysis... | 173 | viii |
| Bartlett, John | | | Baskerville, Dr. Charles | | |
| Mica mining by, Ferguson tp.... | 280 | v | Analyses by, of iron ores, L. Superior..... | 163 | ix |
| Bartlett, Charles | 221 | ix | Bass . | | |
| E. T. | 115 | ix | Timagami dist., lakes..... | 221 | xi |
| G. F. | 63, 294 | xi | black | | |
| J. H. | | | Rainy Lake dist., scarce..... | 97 | iv |
| Evidence by, before R. C..... | 396 | R C | lake , McFAVISH TP., TH. B. D. | | |
| Statement by, <i>re</i> Marmora iron works..... | 15 | ii | Rocks near..... | 169, 170 A | xv |
| Barton, E. A. | 59 | ix | lakes , MATABETCHUAN RIVER, NIP. | | |
| F. | 140 x, 73 | xi | Rise between, and L. Timiskaming..... | 172 | ix |
| J. | 102 vii, 102 | viii | Rabbit lake... .. | 174 | ix |
| S. | | | lake , N. OF ORILLIA, SIMCOE CO. | | |
| Gold mine of, near Wawa lake. | | | Martite on..... | 194 | ii |
| | 102, 195 | vii | | 203 | ix |
| | 101, 102 | viii | lake , S. ELMESLEY TP., LEEDS CO. | | |
| notes..... | 183 A | xv | Marl in..... | 121 A | xiv |
| rocks..... | 191 A | xv | lake , STURGEON RIVER, NIP. | | |
| Licence to..... | 115 ix, 140 x, 73 | xi | Minor ref. to..... | 35 B | xiv |
| | 65 | xii | Rocks in and near..... | 41, 44 B | xiv |
| | 48 A | xiii | lake , VERMILION RIVER, NIP. | | |
| creek , HALDIMAND CO. | | | Rocks in and near..... | 202 A | xiii |
| Gypsum on..... | 53 B | xiii | | 73 C | xiv |
| mine , NEAR WAWA LAKE. See Barton, S. | | | Basswood . | | |
| tp. , WENTWORTH CO. | | | Lake of the Woods..... | 51 | v |
| Cement rock from..... | 165 A | xiv | Rainy river..... | 117 | iv |
| Bartram, David | 54 A | xiii | lake , HUNTER ISLAND, ONT. | | |
| Barwick tp. , R. R. D..... | 167 | v | Iron ore east of..... | 141 | R C |
| Barytes (BARITE, CAWK, ETC.) | | | Bastard, S. R. | 251 | xi |
| As an adulterant..... | 177 | i | tp. , LEEDS CO. | | |
| Bedford tp..... | 41 A | xv | Chalcocopyrite in..... | 196 | ix |
| Canada, production, 1886-87..... | 243 | R C | Crystalline limestone in..... | 72 B | xiii |
| 1888..... | 525 | R C | Iron ore in..... | 31, 32 | ii |
| Crosby tps..... | 53 | R C | analysis..... | 35 | ii |
| Description of..... | 222 | vi | early mining..... | 319 | R C |
| | 529 | R C | notes by Murray..... | 34 | ii |
| Determination of..... | 205 | vi | Mica mining in..... | 104 A | xv |
| Hardness of..... | 202 | vi | | 89 A | xvi |
| Lake Superior..... | 195 | ix | Potsdam sandstone in, for building..... | 80 | R C |
| Caldwell pt..... | 149 | ix | Bat lake , MANITOU LAKE DIST., R. R. D. | | |
| copper-bearing rocks..... | 131 | vi | Rocks on, granite..... | 50 | iv |
| Dorion tp..... | 37, 38 | R C | Batchawana bay , L. SUPERIOR. | | |
| McKellar island..... | 193 ii, 250 | iv | Azurite on..... | 193 | ii |
| | 276 | v | | 195 | ix |
| | 190 | ii | Boulder clay near..... | 156 | viii |
| Port Arthur (near)..... | 57 | xiv | Farming and fishing on..... | 203 | viii |
| Silver Mountain mines..... | 53 B | xiv | Geology of, notes by Coleman and Willmott..... | 127, 128 | viii |
| Lanark co., Bathurst tp..... | 53 | R C | Gold and silver on and near..... | 26, 60, 203 | R C |
| Ramsay tp..... | 146 | R C | Iron ore on..... | 23 | R C |
| Methuen tp., Oak Lake road..... | 213 | viii | hematite..... | 64 | ii |
| Occurrences..... | 195 | ix | notes by Coleman. 161-163 | ix | |
| Oso tp..... | 53 | R C | 189, 190, 201 | x | |
| Specific gravity of..... | 202 | vi | Lumbering on..... | 203 | viii |
| United States, production, 1888. | 525 | R C | | | |
| Uses of..... | 222 | vi | | | |
| Baryto-Celestite . | | | | | |
| Kingston (near)..... | 195 | ix | | | |

| | Page. | Vol. |
|---|------------|------|
| Batchawana bay.—<i>Con.</i> | | |
| Lumbering on, pulpwood..... | 206 | vii |
| Manganite on..... | 202 | ix |
| Rocks on and near..... | 183 | ix |
| | 220 A | xiii |
| Huronian.....157, 163, | 164 | viii |
| Keewenawan..... | 168 | viii |
| Nipigon..... | 39 | R C |
| sandstone..... | 40 | R C |
| Shoals in..... | 68 | iii |
| Terraces north of, altitude..... | 153 | viii |
| | 211 | x |
| lake, BATCHAWANA BAY, L. | | |
| SUPERIOR. | | |
| Iron ore on..... | 314 | xii |
| mine, BATCHAWANA BAY, L. | | |
| SUPERIOR. | | |
| Rocks near..... | 189 | x |
| river, BATCHAWANA BAY, L. | | |
| SUPERIOR. | | |
| Description by Coleman..... | 128 | viii |
| Jasper on..... | 190 | x |
| Terraces at mouth of, height.... | 155 | viii |
| Valley of, notes by Charlton..... | 200-203 | viii |
| Batchelor kiln. | | |
| Notes and diagrams..... | 126, 127 A | xiv |
| Bate, T. B. | 149 | xi |
| Bates, George | | |
| Gold mining by, L. of the Woods | 40 | vii |
| M. W. | | |
| Gold mining by, near Sawbill lake | 132 | vii |
| Bath, ERNESTOWN TP., ADDINGTON CO. | | |
| Terrace near..... | 241 A | xiii |
| island, L. OF THE WOODS. | | |
| Gold mining on, 1896..... | 49, 103 | vi |
| 1897..... | 40, 112 | vii |
| 1898..... | 60 | viii |
| Island Mining Co. | | |
| Incorporation of..... | 7 | vii |
| Work by, L. of the Woods..... | 49 | vi |
| | 40, 112 | vii |
| Road quarry, BATH ROAD. | | |
| KINGSTON. | | |
| Analysis of limestone from..... | 44 B | xiii |
| Batholites. | | |
| Ontario and United States..... | 156, 157 | vii |
| Bathurst tp., LANARK CO. | | |
| Apatite in..... | 46 | ii |
| Barytes in..... | 53 | R C |
| | 195 | ix |
| Bytownite in..... | 195 | ix |
| Calcareous vein in, cutting granite | 103 B | xiii |
| Hornblende crystals in..... | 199 | ix |
| Iron ore in..... | 138 | R C |
| analysis..... | 81 | ii |
| hematite..... | 199 | ix |
| magnetite..... | 46 | ii |
| | 202 | ix |
| mining..... | 135 | R C |
| early..... | 44 | ii |
| notes by Morris..... | 137 | R C |
| <i>See also</i> Foley iron mine. | | |
| Iron pyrites in..... | 138 | R C |
| Limestone in..... | 46 | ii |
| Mica mining in..... | 290 | xi |
| Orthoclase in..... | 205 | ix |
| Peristerite in..... | 194 | ii |
| analysis..... | 206 | ix |

| | Page. | Vol. |
|--|---------------|------|
| Bathurst tp.—<i>Con.</i> | | |
| Plumbago in..... | 181 | R C |
| Pyroxene in..... | 207 | ix |
| Raphilite in..... | 208 | ix |
| Tourmaline in..... | 211 | ix |
| exhibited at World's Fair..... | 190 | ii |
| Tremolite in..... | 211 | ix |
| Wilsonite in, analysis..... | 211 | ix |
| Batiscan river, CHAMPLAIN CO., QUE. | | |
| Blast furnace on..... | 24 | ii |
| Battery. <i>See</i> Stamp mill. | | |
| Battle, John | | |
| Cement producing, 1901..... | 32 | xi |
| 1902.....28, | 31 | xii |
| 1903..... | 18 A | xiii |
| Plant of, notes on..... | 164, 165 A | xiv |
| <i>See also</i> Thorold Hydraulic Cement Works. | | |
| bay, L. OF THE WOODS. | | |
| Rocks on..... | 99 | vi |
| lake, TEMPLETON TP., WRIGHT CO., QUE. | | |
| Apatite pockets on, showing banded structure..... | 411 | R C |
| ships. | | |
| Armour of, nickel steel for..... | | |
| 176, 229, 230 | | i |
| 147-163 | | ii |
| <i>See also</i> British Admiralty: Nickel-steel. | | |
| Pig-iron as ballast for..... | 18 | ii |
| Bauerman, H. | | |
| Notes by, on metallurgy of iron. | 472, 479 | R C |
| Bauldrey, W. J. | 102 | viii |
| | 115 | ix |
| | 73 | xi |
| lake, MICHIPICOTEN DIV., ALG. | | |
| Iron ore belt near..... | 173 | xi |
| Minor ref. to..... | 154 | xi |
| Morainic ridges and glacial striae near..... | 185 | xi |
| Rocks near.....157, 161, 180-182 | | xi |
| Baultz, Herman. | 208, 211, 212 | iv |
| Paul. | 211 | iv |
| Bauxite. | | |
| Hardness and specific gravity of. | 201 | vi |
| Bavaria, GERMANY. | | |
| Lithographic stone in..... | 6 B | xiii |
| analysis..... | 182 | ii |
| Peat drying processes in..... | 193 | i |
| used in, for moss litter..... | 212 | ii |
| on railways..... | 202 | i |
| Pencil factories in..... | 37 | vi |
| Bawden, Gus. A. | 94 | viii |
| Fred. J. | 243 | xi |
| Joseph | | |
| Acknowledgments to..... | 83 | v |
| Evidence by, before R. C. re:— | | |
| apatite..... | 170 | R C |
| free-trade..... | 233 | R C |
| iron..... | 52, 133 | R C |
| smelting..... | 390 | R C |
| mica..... | 150 | R C |
| reference to same..... | 341 | R C |
| | 58 | ii |
| technical instruction..... | 427 | R C |
| Govt. drill lent to..... | 174 | iv |

| | Page. | Vol. |
|---|------------|------|
| Bawden, Joseph—Con. | | |
| Operating Glendower iron mine. | 227 | v |
| mica in Miller tp. | 150 | R C |
| | 289 | xi |
| Storrington tp. | 133 | x |
| Paper by, on Charcoal and Charcoal iron | 468-486 | R C |
| Baxter, Alexander | | |
| Early mining by, L. Superior. | 111, 209 | v |
| Hon. J. | | |
| Evidence by, before R. C. | 55 | R C |
| | 54 B | xiii |
| Oil Co. | | |
| Capital and date of charter. | 27 A | xvi |
| Bay City, Bay co., MICH. | | |
| Sulphuric acid works at | 184 A | xvi |
| Bay (OR MATTAGAMASHING) lake, | | |
| MONTREAL RIVER, NIP. | | |
| Argillites on | 73 | i |
| Cobalt ore near | 6 B | xiv |
| | 11 A | xv |
| prospecting | 87 A | xv |
| Photo of part of | 176, 177 | vi |
| Smaltite on | 11 A | xv |
| of Islands, BAD VERMILION | | |
| LAKE, R. R. D. | | |
| Cobalt bloom on | 74 | iv |
| | 198 | ix |
| | 60 B | xiv |
| of Quinte, L. ONTARIO. | | |
| Blast furnace on, <i>See</i> Deseronto. | | |
| Cement works on | 33 | xii |
| (<i>See also</i> Belleville | 17 A | xiii |
| Portland Cement Co.) | 19 B | xiii |
| | 133 A | xiv |
| Iroquois beach on | 242, 243 A | xvi |
| Limestone quarries on | 27 B | xiii |
| Trenton formation on | 89 B | xiii |
| of Quinte railway. | | |
| Limestones along, analyses. | 27 B | xiii |
| St. Paul, CHARLEVOIX CO., | | |
| QUE | | |
| Nickel at | 231 | vii |
| Titanic iron ore at | 472 | R C |
| Bays | | |
| Origin of deep | 48 | R C |
| Bay street, TORONTO. | 106 | iii |
| Baycroft, J. A. | 72 A | xiv |
| Bayfield, Capt. H. W. | 194 | R C |
| | 127 | vi |
| | 131 | viii |
| | 29, 36 B | xiii |
| sound, MANITOULIN ISLAND. | | |
| Rocks on and near | 78, 79 B | xiii |
| Bayham tp., ELGIN CO. | | |
| Guelph formation in. <i>See</i> Eden. | | |
| Limestone in, Corniferous. <i>See</i> | | |
| Vienna. | | |
| Bayley, W. S. | 149, 170 | ix |
| | 202 | x |
| Beaches. <i>See</i> Terraces. | | |
| BC18 gold loc. <i>See</i> New Golden | | |
| Twins mine. | | |
| Beachville, OXFORD TP., OXFORD CO. | | |
| Fossils from | 153 | xii |
| | 92 B | xiii |
| Lime kilns at | 14 A | xiii |
| Limestone at, analysis | 92 B | xiii |
| character | 25 B | xiii |

| | Page. | Vol. |
|---|------------|------|
| Beachville.—Con. | | |
| Limestone.— <i>Con.</i> | | |
| quarries, | | |
| notes. | 148, 149 | xii |
| photo. | 64, 65 B | xiii |
| Beamsville, CLINTON TP., LINCOLN | | |
| co. | | |
| Brick and tile works at | 15 A | xiii |
| | 102 | i |
| notes. | 78 B | xv |
| and photo | 8 B | xv |
| Clay from, analysis | 228 A | xiii |
| Iroquois beach at | 73 B | xiii |
| Limestone at, fossiliferous | 97 | i |
| quarrying | 74 B | xiii |
| notes | 7 B | xiv |
| Medina shale at | 128 | iii |
| for bricks. | | |
| Beans. | | |
| Mentioned as growing at : | | |
| Abitibi lake | 50 A | xvi |
| Fort Mattagami | 121 A | xiii |
| Lac des Mille Lacs | 114 | v |
| Lake of the Woods | 105 | vi |
| Mississagi river | 164 | xii |
| Moose Factory | 107 | iv |
| Rainy river | 163 | v |
| Bear. | | |
| Hinterland, The | 133 | iv |
| Hudson Bay slope | 178 | vi |
| Lake Huron slope | 170 | vi |
| Matawin valley | 129 | v |
| Mattagami valley | 131 A | xv |
| Michipicoten div. | 297 A | xiv |
| | 200 A | xv |
| Mississagi river | 172 | xii |
| Moose River basin | 178 A | xiii |
| Nipigon Lake dist. | 130 A | xvi |
| black | | |
| Abitibi dist. | 127 A | xiii |
| | 253 A | xiv |
| Abitibi river, south of | 189 | xii |
| Rainy Lake dist., scarce | 97 | iv |
| polar | | |
| Hudson bay and strait. | 133 | iv |
| bay, L. OF THE WOODS. | | |
| Rocks on | 99 | vi |
| creek, NEAR BRULÉ STATION, | | |
| R. R. D. | 73 | viii |
| island, TIMAGAMI LAKE, NIP. | | |
| H. B. C. post on | 58 | R C |
| | 161 | x |
| lake, ENGLISH RIVER, R. R. D. | | |
| Geology of, and vicinity | 163 | vii |
| Pleistocene deposits near | 172 | vii |
| Rocks on, dolomite | 207 A | xvi |
| schist | 147 | xi |
| Timber west of | 180 | vii |
| lake, McVITTIE AND MCGARRY | | |
| TPS., NIP. | | |
| Map of | 202, 203 A | xvi |
| lake, MICHIPICOTEN DIV., ALG. | | |
| Minor ref. to | 179 A | xv |
| Morainic deposits near | 192 A | xv |
| Rocks near | 205 A | xv |
| lake, NEAR WHISKEY LAKE, | | |
| ALG. | | |
| Copper mining near | 65, 67 A | xiv |
| Galena near, argentiferous. | 70 A | xv |
| Lake mica mine, LOUGHBORO | | |
| TP., FRONTENAC CO. | | |

| | Page. | Vol. |
|--|------------|------|
| Bear lake mica mine.—<i>Con.</i> | | |
| Notes on, 1900..... | 135 | x |
| 1901..... | 288, 289 | xi |
| 1902..... | 126 | xii |
| 1905..... | 103 A | xv |
| mt., PUKASKWA RIVER, L. SUPERIOR. | 281 A | xiv |
| pass, HALKIRK TP., R. R. D. | 134 | xi |
| passage, RAINY LAKE, R. R. D. | | |
| Rocks in..... | 52, 77, | iv |
| Veins in, character..... | 59 | iv |
| pyrites claim, NEAR GOUDREAU LAKE, MICHIGOTEN DIV. | | |
| Notes on..... | 186, 187 A | xv |
| ..... | 179, 180 A | xvi |
| ..... | 192 A | xvi |
| river, L. SUPERIOR, ALG. | 282, | xiv |
| =skin lake, CLEAR CREEK, WINDIGOKAN, LAKE, TH. B. D. | 138 A | xvi |
| Beatrice (or SHEPPARD) nickel mine, BLEZARD TP., NIP. | | |
| Idle, 1894..... | 249 | iv |
| Name of, changed..... | 190 | iii |
| Notes on, 1892..... | 249 | ii |
| 1893..... | 190 | iii |
| Whartonite from, analysis..... | 169, 170 | ii |
| Beattie, A. F. | 74 A | xiii |
| Beatty, James | 45 | x |
| John | 206 | v |
| S. G. | 16 | v |
| W. R. See Beatty and Wilcox mine | | |
| Walter | 212 | x |
| Beatty and Wilcox copper mine, COWPER TP., P. S. D. | | |
| Accident at..... | 32, 33 | ix |
| Notes on, 1897..... | 88, 93 | vii |
| 1898..... | 260, 261 | viii |
| 1899..... | 100, 167 | ix |
| 1900..... | 121 | x |
| Operating, 1903..... | 94 A | xiii |
| 1904..... | 80 A | xiv |
| Rocks of, petrography..... | 180, 181 | ix |
| Shut down..... | 37 | x |
| Summer mining class at..... | 282 | viii |
| Beauce co., QUE. | | |
| Platinum in..... | 207 | vi |
| Scheelite in..... | 217 | vi |
| Zinc-blende in..... | 210 | vi |
| Beaudro, G. | 115 | ix |
| Beauharnois, BEAUHARNOIS CO., QUE. | | |
| Fossil tracks at..... | 40 | R C |
| tp., QUE. | | |
| Peat in. See Valleyfield. | | |
| Beaulieu, John | 50 | xi |
| Beauport, QUEBEC CO., QUE. | | |
| Anthracite at..... | 6 Bull. | ii |
| Beaver. | | |
| Abitibi dist..... | 178, 183 | viii |
| ..... | 189 | xii |
| ..... | 127 A | xiii |
| ..... | 242 A | xiv |
| Hinterland, The..... | 133 | iv |
| Hudson Bay slope..... | 178 | vi |
| Isle Parisienne, L. Superior, experimental farm for..... | 110 | v |
| Lake of Bays..... | 166 | vii |
| Lake of the Woods..... | 116, 118 | vii |
| Michipicoten div..... | 297 A | xiv |

Beaver.—*Con.*

| | Page. | Vol. |
|--|------------------|------|
| Mississagi valley..... | 172 | xii |
| Niven's base line, Alg., almost extinct..... | 142 | ix |
| Nipigon Lake dist. (reported) .. | 139 A | xvi |
| Timagami Lake dist..... | 58 | R C |
| Cement Co. | | |
| Merged in Canadian Portland Co. | 16 | x |
| ..... | 136 A | xiv |
| creek, CONMEE TP., TH. B. D. | | |
| Pyrites on..... | 172 A | xvi |
| dams. | | |
| Abitibi dist..... | 127 A | xiii |
| Caribon island, L. Superior..... | 111 | v |
| Foy tp..... | 201 A | xiii |
| ..... | 70 C | xiv |
| Jarvis lake..... | 105 A | xiii |
| Mattagami valley..... | 190, 192 A | xiv |
| ..... | 131 A | xv |
| Pukaskwa river..... | 137 | viii |
| Sinclair mt. (near)..... | 178 | vi |
| inlet, L. OF THE WOODS. | | |
| Description of..... | 116 | vii |
| Pyroxenite from, petrography .. | 146 | vii |
| lake, ADDINGTON CO. | | |
| Contact of Laurentian-Silurian on | 27 B | xiii |
| lake, LITTLE TP., ALG. | | |
| Boulder clay on..... | 187, 194 A | xiv |
| Park's description of, ref. to.... | 197 A | xiv |
| meadows. | | |
| Creighton tp..... | 45 | iii |
| Mining and Mica Co. | | |
| Exhibits of, at Pan-American... | 25 A | xv |
| Owners, Beaver silver mine, Coleman tp..... | 86 A | xv |
| Milling Co. | | |
| Capital and date of charter..... | 7 | vii |
| Oil and Gas Co. | | |
| Capital and date of charter..... | 11 | xi |
| Work by, in Dutton field..... | 108 A | xiv |
| portage, MISSINABBI RIVER, ALG. | | |
| ..... | 195 | viii |
| river, L. SIMCOE. | | |
| Calcareous tufa on..... | 110 B | xiii |
| Clinton formation on..... | 48 B | xiii |
| Marl on..... | 51 B | xiii |
| Niagara formation on..... | 49, 50 B | xiii |
| Trenton formation on..... | 89 B | xiii |
| river, SEINE RIVER, R. R. D. | | |
| Description of Seine river near.. | 151 | v |
| Silver Cobalt Mg. Co. | | |
| Capital and date of charter..... | 27 A | xvi |
| silver mine, COLEMAN TP., NIP. | | |
| Native silver in..... | 86 A | xv |
| silver mine, O'CONNOR TP., TH. B. D. | | |
| Animikie formation in..... | 35 | R C |
| ..... | 237 | iv |
| Argentite in..... | 194 | ix |
| Asbestos in..... | 193 | ii |
| mountain leather..... | 205 | ix |
| Calcite in..... | 195 | ix |
| Controlled by Algoma Mg. Co.. | 96 | xii |
| Copper in, native..... | 197 | ix |
| Dike in..... | 67 | R C |
| Evidence <i>re</i> , before R. C. | 63, 196-201, 208 | R C |
| Fault in..... | 237 | iv |

| | Page | Vol. |
|---|------------|------|
| Beaver silver mine. — <i>Con.</i> | | |
| Harmstone in..... | 199 | ix |
| Inspector's report on, 1891..... | 226 | i |
| Minor reference to..... | 5 A | xv |
| Natural gas in..... | 54 B | xiv |
| Notes on, by Merritt..... | 192 | R C |
| Roland..... | 225 | i |
| Operations in, suspended, 1892..... | 239 | ii |
| unprofitable..... | 177 | i |
| Output of, to 1888..... | 208 | R C |
| Saponite in..... | 208 | ix |
| 52 B | xiv | |
| Section of..... | 193 | R C |
| Silver in, native..... | 207 | vi |
| Timber near..... | 114 | ii |
| Vein in, course of... 33, 62, 198, | 203 | R C |
| Beaverhead island, MANITOU LAKE, | | |
| R. R. D. | | |
| Gold mining S. of..... | 99 | x |
| <i>See also</i> Royal Sovereign mine. | | |
| Iron on..... | 136 | xi |
| Beaverhouse lake, Nip. <i>See</i> Misemikowish lake. | | |
| Beaverton, THORA TP., ONTARIO CO. | | |
| Brickyard at, notes and photo. 87, 88 B | xv | |
| Clay from, for Raven Lake Portland Cement Co..... | 157 A | xiv |
| Peat at, analysis..... | 202 | xii |
| fuel from..... | 25 A | xvi |
| cost of making..... | 225 | xii |
| method of working..... | | |
| 210-214, 217, 218, | 224 | xii |
| notes..... | 204 | xii |
| paper from..... | 35 | xii |
| plant, notes..... | 22 | ix |
| 27, 29 A | xiii | |
| photo..... | 208, 209 | xii |
| output..... | 23 A | xiv |
| 24 A | xv | |
| Beaverton Brick and Tile Co | | |
| Brickyard of, notes and photos 87, 88 B | xv | |
| clay for, analysis..... | 15 B | xv |
| Bechtel, Byron E. <i>See</i> Bechtels, Ltd. | | |
| Bechtels, Ltd. | | |
| Brick works of, Waterloo:— | | |
| clay for, analysis..... | 14 B | xv |
| machinery..... 43, 46, 49, 102, | 103 B | xv |
| notes..... | 102, 103 B | xv |
| producing, 1902..... | 29 | xii |
| Capital and date of charter..... | 27 A | xvi |
| Beck (SILVER HARBOUR) silver mine, | | |
| McGREGOR TP., TH. B. D. | | |
| Notes on, by Bell..... | 34 | R C |
| Veins in, character..... | 198 | R C |
| 238 | iv | |
| course..... | 33 | R C |
| Becker, O. | 115 | ix |
| 140 | x | |
| 48 A | xiii | |
| Becket, E. C. | | |
| Brickyard of, Orwell..... | 62 B | xv |
| Beckwith tp., LANARK CO. | | |
| Calcareous formation in..... | 70 B | xiii |
| Lead mining in. <i>See</i> Carleton Place, and Ramsay mine. | | |
| Peat in..... | 190 | i |
| Bequerel, E. | | |
| Galvanic nickelling by..... | 158 | ii |
| Becraft mt., COLUMBIA CO., N. Y. | 190 A | xiii |

| | Page | Vol. |
|--|--------------|------|
| Bedded veins. | | |
| Definition of..... | 253 | v |
| Bedford, Jack. | 154, 155 | v |
| Bedford iron mine, BEDFORD TP., FRONTENAC CO. | | |
| Notes on, 1898..... | 30, 31 | viii |
| mills, BEDFORD TP., FRONTENAC CO. | | |
| Apatite mining near. <i>See</i> Sharbot lake. | | |
| Barytes near..... | 41 A | xv |
| Mining Co. | | |
| Capital and date of charter..... | 7 | vii |
| Notes on, 1890, by the manager. | 134 | R C |
| Work by..... | 103 | ix |
| quarry, ROSS TP., RENFREW CO. | | |
| Analysis of limestone from..... | 106 B | xiii |
| station, BEDFORD MILLS, FRONTENAC CO. | | |
| Feldspar near..... | 26 | x |
| 90 A | xiii | |
| Limestone near, analysis..... | 45 B | xiii |
| Scapolite rocks near..... | 229 | viii |
| microphoto. 216, 217 | | viii |
| tp., FRONTENAC CO. | | |
| Apatite in..... | 194 | ix |
| mining, 1891..... | 239, 245 | i |
| 1892..... | 250, 251 | ii |
| evidence before R. C. 134, 175-176 | | R C |
| <i>See also</i> Bobs lake. | | |
| with crystalline limestone..... | 46 | ii |
| Calcite in..... | 195 | ix |
| Crystalline limestone in..... | 47 | ii |
| Feldspar in, mining, 1900..... | 26 | x |
| 1901..... | 39 | xi |
| 1902..... | | |
| 37, 137, 138 | xii | |
| 1903..... | 21 A | xiii |
| 1904..... | 19 A | xiv |
| 1905..... | 19, 99-101 A | xv |
| prospecting..... | 81-83 A | xiv |
| <i>See also</i> Richardson | | |
| feldspar mine. | | |
| Galena in..... | 198 | ix |
| Graphite in..... | 52, 134, 181 | R C |
| 199 | ix | |
| Hornblende in..... | 199 | ix |
| Iron ore in..... | 134 | R C |
| 31, 32, 36, 37 | ii | |
| analysis..... | 54, 55 | ii |
| exhibited in London..... | 33 | ii |
| World's Fair | 81 | ii |
| hematite..... | 199 | ix |
| magnetite..... | 52 | R C |
| 46, 47 | ii | |
| 288 | viii | |
| 202 | ix | |
| mining..... | 103 | ix |
| <i>See also</i> Glendover mine. | | |
| Howse mine. | | |
| Wolf lake. | | |
| notes by Vennor..... | 43 | ii |
| Iron pyrites in..... | 207 | ix |
| 150 A | xvi | |

| | Page. | Vol. |
|---|-----------|------|
| Bedford tp.—<i>Con.</i> | | |
| Mica in | 150 | R C |
| mining | 23 A | xvi |
| 1891 | 245 | i |
| 1900 | 133 | x |
| 1903 | 92 A | xiii |
| 1904 | 86 A | xiv |
| Pyroxene in | 207 | ix |
| Raphilite in | 208 | ix |
| Serpentine in | 209 | ix |
| Vesuvianite in | 211 | ix |
| Bedshiel, BERWICKSHIRE, SCOTLAND. | 187 | i |
| Beebe, James C. | | |
| Manager, Emperor gold mine. | 45, 84 | viii |
| Empress gold mine. | 82 | ix |
| W. D. | 115 | ix |
| ..... | 140 | x |
| ..... | 73 | xi |
| ..... | 65 | xii |
| ..... | 48 A | xiii |
| Beech. | | |
| Heating power of | 54 B | xvi |
| Hungary, gasifying of, for iron | | |
| smelting | 484 | R C |
| Rainy river | 207 | v |
| Bee-hive gold mine, MANITOU IS- | | |
| LAND, MANITOU LAKE, R. R. D. | 77 | vii |
| Beemer, H. J. | 86, 87 | ix |
| Beer. | | |
| Arsenical poisoning caused by... | 121 | xi |
| Beets. | | |
| Fort Mattagami | 121 A | xiii |
| Lac des Mille Lacs | 114 | v |
| Lake of the Woods | 105 | vi |
| Rainy river | 163 | v |
| Beetle, ash=coloured blister. | | |
| Abitibi dist. | 129 A | xiii |
| Black blister. | | |
| Abitibi dist. | 129 A | xiii |
| Buttercup oil. | | |
| Abitibi dist. | 129 A | xiii |
| Potato. <i>See</i> Colorado beetle. | | |
| Beeton, TECUMSETH TP., SIMCOE CO. | | |
| Brickyard at, notes | 99 B | xv |
| Beet-root sugar. | | |
| Lime used in making | 2, 3 B | xiii |
| Begg, W. A. | | |
| Sketch map by, of Coleman tp. | 9, 10 B | xiv |
| ref. to | 37 B | xiv |
| Work by, 1905 | 156 A | xv |
| Beggs, T. J. | 65 | xii |
| ..... | 48 | xiii |
| Beharriel, F. J. | 85 | x |
| ..... | 111 | ix |
| ..... | 187 | iii |
| Behenna, George H. | | |
| Belden, Denison & Co. | | |
| Quarrying by, Niagara and Stam- | | |
| ford tps. | 95, 96 | i |
| ..... | 74, 119 B | xiii |
| Belfast & Northern Counties Ry. | | |
| Tests by, on peat as fuel | 203 | i |
| Belfountain road, PEEL CO. <i>See</i> Belle- | | |
| fontaine. | | |
| Belgian Bank. | | |
| Atikokan iron deposits leased by | 236 | i |
| ..... | 191 | iii |
| Belgium. | | |
| "Balance of trade" against, 1868- | | |
| 1886 | 397 | R C |

Belgium.—*Con.*

| | Page. | Vol. |
|---|----------------|------|
| Cement exports to, 1900 | 15 | x |
| 1901 | 33 | xi |
| 1902 | 34 | xii |
| 1903 | 35 | xli |
| Iron and steel production, 1888. | 224 | M C |
| Mining laws of | 298 | R C |
| schools in, location of | 420 | R C |
| Nickel coinage in | 161 | ii |
| composition | 164 C | xiv |
| ..... | 184 | iv |
| Bell, A. | 105 | xi |
| Rev. Andrew | 218 | i |
| B. T. A. | | |
| Evidence by, before R. C., <i>re</i> : | | |
| apatite | 177 | R C |
| mineral lands | 313 | R C |
| technical education | 423 | R C |
| Minor ref. to | 210 | ii |
| Sir Isaac Lowthian. | | |
| Data by, <i>re</i> iron | | |
| smelting ... 329, 341, 358, 361, 385 | | R C |
| ..... | 84 | ii |
| Evidence by, <i>re</i> royalties in Gt. | | |
| Britain | 18 | i |
| ref. to | 507 | R C |
| Minor ref. to | 321 | R C |
| Notes by, on metallurgy of | | |
| steel 362, 365, 369 | | R C |
| smelting with charcoal | 483 | R C |
| peat 207 | | i |
| puddling with Cort's | | |
| invention | 359 | R C |
| Views of, on practical scientific | | |
| education | 429, 430 | R C |
| J. Mackintosh | | |
| Criticized <i>re</i> geological nomen- | | |
| clature of Michipicoten div. ... | 174 A | xv |
| Reports by: | | |
| Michipicoten div. | 278-355 A | xiv |
| ref. to | 12 A | xiv |
| ..... | 15, 173, 174 A | xv |
| ..... | 143 A | xvi |
| Moose River basin | 135-197 A | xiii |
| Work by, 1903 | 12 A | xiii |
| J. R. | 227 | iv |
| ..... | 238 | v |
| Prof. James | | |
| Tin found by, Marmora dist. | 36 | iv |
| James (ELGIN CO.) | 60 | i |
| James (LANARK CO.) | | |
| Apatite mining by, Storrington | | |
| tp. | 173 | R C |
| ..... | 239 | i |
| <i>See also</i> Bell apatite mine. | | |
| James (RENFREW CO.) | | |
| Evidence before Royal Com. <i>re</i> : | | |
| apatite | 53, 173 | R C |
| ignorance concerning mines .. | 427 | R C |
| iron | 141 | R C |
| Iron claims of, Renfrew co., notes | | |
| by Merritt | 129 | R C |
| ore from, at World's | | |
| Fair | 79 | ii |
| M. E. <i>See</i> Bell and Scott. | | |
| Peter <i>See</i> Peter Bell Iron Co. | | |
| Dr. Robert | | |
| Altitude of Onaping lake deter- | | |
| mined by | 156 | x |

| | Page. | Vol. |
|--------------------------------------|------------|------|
| Bell, Dr. Robert.—Con. | | |
| Appointed on Royal Commission | 10 | R C |
| Carbonaceous shales found by, | | |
| Abitibi river..... | 159 A | xiii |
| Coal reported by, Long island, | | |
| Lab..... | 126 | iv |
| Missinaibi riv. | 125 | iv |
| Northern | | |
| Ont.... | 161, 162 A | xiii |
| Criticized <i>re</i> Sudbury map.... | 242 | xii |
| Description by, of | | |
| iron ore, Mattagami river..... | 77 | ii |
| James bay..... | 130 | iv |
| ore body, Blezard mine.. | 254, 255 | xii |
| | 56 C | xiv |
| Extract from rep. by, on explora- | | |
| tions between L. Huron and | | |
| James bay..... | 137 | vi |
| Geological nomenclature by..... | 4 | R C |
| Glossary by, of geological and | | |
| mining terms..... | 528-545 | R C |
| Iron ore found by : | | |
| Mattagami river..... | 52 | ii |
| | 9 A | xiii |
| Wabigoon Lake dist..... | 136 | xi |
| Letter by (and others) as Royal | | |
| Commissioner..... | xxiv | R C |
| Limestone found by, Mattagami | | |
| river..... | 152 A | xiii |
| Notes by, on : | | |
| country N. of L. Superior..... | 112 | iv |
| copper in Huronian belt..... | 234 | i |
| iron ores, Kaministiquia river | 69 | ii |
| Mattagami river..... | 126 | iv |
| Pic river..... | 313 | xii |
| Huronian gold mine..... | 124 | v |
| Kenogami valley..... | 112 | iv |
| Kenora..... | 169 | v |
| limestone near Parry harbour. | 95 B | xiii |
| magnetic separator, early use of | 491 | R C |
| Moose river..... | 114 | iv |
| agricultural land along..... | 108 | iv |
| climate..... | 106 | iv |
| natural gas at Little Current.. | 140 | i |
| Ombabika river..... | 202 | v |
| rocks of Rutherford tp..... | 30, 31 B | xiii |
| Sandy lake, R. R. d..... | 55 | v |
| Sudbury dist., ores..... | 233 | i |
| surveying diffi- | | |
| culties..... | 171 | i |
| Vermilion mine | 179 | ii |
| timber of the Hinterland..... | 120 | iv |
| Papers by, on | | |
| Geology of Ontario..... | 1-52 | R C |
| ref. to..... | 10, 13 | R C |
| Laurentian and Huronian sys- | | |
| tems of L. Huron..... | 63-94 | i |
| Laurentian rocks..... | 6-10 | R C |
| | 247-249 | v |
| Life of Alexander Murray. | 218-222 | i |
| Minerals in the Sudbury | | |
| dist..... | 433-436 | R C |
| Photo of..... | 277 A | xiv |
| | 135 C | xiv |
| Reference to paper by, on petrol- | | |
| enum field of Canada..... | 115 | i |
| References to surveys by : | | |
| Abitibi river..... | 142 A | xiii |
| Atikokan river..... | 70 | ii |

| | Page. | Vol. |
|--|--------------------|------|
| Bell, Dr. Robert.—Con. | | |
| Brockville (near)..... | 221 | x |
| Hudson Bay region..... | 93 | v |
| | 200, 215 | x |
| Lac Seul..... | 61 | v |
| Lake Superior, north of.... | 64, 65 | ii |
| | 79 | v |
| | 157, 167 | viii |
| | 288 A | xiv |
| Manitoulin island..... | 75, 76 B | xiii |
| | 72 A | xv |
| Mattagami valley..... | 117 A | xv |
| Mattawa river..... | 81 B | xiii |
| Michipicoten div..... | 80 | iii |
| | 187, 189 | vii |
| | 162 | ix |
| | 279 A | xiv |
| Minnitaki lake..... | 57 | v |
| Moose River basin..... | 127 | iv |
| | 186 | vii |
| | 136, 194 | viii |
| Nipigon lake..... | 213 | x |
| | 105 A | xvi |
| Parry Sound dist..... | 166 | ix |
| Sudbury dist..... | 3, 6 Bull. | ii |
| | 159, 161, 168, 170 | vi |
| | 136, 137, 158 | vii |
| | 160-162, 206 | x |
| | 235-239, 276, 278 | xii |
| | 1-5 C | xiv |
| Report by, and others, on Pre- | | |
| Cambrian nomenclature... 269-277 A | | xiv |
| Temperature of Hudson Bay | | |
| waters given by..... | 107 | iv |
| Timber tracts discovered by, Not- | | |
| taway basin, Que..... | 204 | v |
| Victoria silver mine examined by | 123 | viii |
| Views of, on : | | |
| Archaean rocks of Ont..... | 245 | v |
| Boring for gas at Mimico ... | 138 | i |
| Stephen, H. P. | 22 | xi |
| Bros. | | |
| Brickyards of : | | |
| Drew..... | 105 B | xv |
| Paisley, analysis of clay..... | 15 B | xv |
| notes and photo..... | 59 B | xv |
| Toronto..... | 28 | xii |
| | 108 B | xv |
| and Scott. | | |
| Iron mining by, Michipicoten | | |
| div..... | 104 | x |
| | 104 | xii |
| apatite mine, STORRINGTON TP., | | |
| FRONTENAC CO. | | |
| Rocks of..... | 438, 441 | R C |
| river, MATTAGAMI LAKE, QUE. | | |
| Timber in valley of..... | 204 | v |
| Bella Donna lake, S. E. ALGOMA. | | |
| Nomenclature of..... | 160 | xii |
| Bellamy Edward | 107 | v |
| Belle river, MAIDSTONE TP., ESSEX CO. | | |
| Corniferous formation near, | | |
| thickness..... | 47 | R C |
| Belleau, E. | 102 | vii |
| F. J..... | 124 | vii |
| I. N..... | 102 | vii |

| | Page. | Vol. | | Page. | Vol. |
|---|-----------------|--------|---|---------------|--------|
| Bellefontaine, CALEDON TP., PEEL CO. | | | Belmont gold mine.—Con. | | |
| Limestone near | 95 | B xiii | Photos of | 128, 129 | x |
| Cambro-Silurian | 39 | B xiii | Plan of | 199 | xi |
| Sandstone quarries near | 98 | i | Plant of, photos | 112, 113 | xii |
| Bellegarde, HAUTE SAVOIE, FRANCE. | | | Producing, 1903 | 5 | A xiii |
| Water power at | 485 | R C | Purchased by Cordova Exp. Co. . | 88 | vii |
| Belluraphon. | | | Quartz of, character | 37 | iv |
| Kwataboahagan river, photo of, | | | Rocks of | 205, 206 | xi |
| in limestone | 192, 193 | A xiii | diorite | 39 | iv |
| “ <i>pelops.</i> | | | Summer mining class at | 52-54 | A xiii |
| Kwataboahagan river, notes by | | | Water power for, from Mada- | | |
| Parks | 187 | A x ii | waska river | 27 | xi |
| Belleville, THURLOW TP., HASTINGS | | | | 14 | A xv |
| CO. | | | Worked by the South African | | |
| Assay office at. <i>See</i> Provincial | | | Mg. Co. | 192 | ii |
| Assay office. | | | Gold Mines Co. | | |
| Beach from, to Gananoque | 241 | A xiii | Capital and date of charter | 38 | A xiii |
| Boulder pavement near | 240 | A xiii | Floated by Cordova Expl. Co. 14, | 111 | xii |
| Brick-yard in | 69 | A xv | iron mine, CROW LAKE, BEL- | | |
| analysis of clay used in | 17 | A xv | MONT TP. | | |
| Cement plant near | 59 | B xiii | <i>See</i> Ledyard iron mine. | | |
| Character of country around | 222 | x | lake, PETERBOROUGH CO. | | |
| Limestone near, analysis | 61, 62 | B xiii | Iron ore on and near | 42 | ii |
| quarried. <i>See</i> | | | specular | 39 | ii |
| Point Ann. | | | Limestone on | 97 | B xiii |
| Trenton | 27 | B xiii | tp., PETERBOROUGH CO. | | |
| Marl in | 121 | A xiv | Gold in | 199 | ix |
| Portland Cement Co. | | | mining. <i>See</i> Belmont gold | | |
| Capital and date of charter | 37 | A xiii | mine. | | |
| Clays and marls used by, analyses | 183 | A xiv | Iron ore in | 36, 39 | ii |
| Notes on, 1902 | 33 | xii | exhibited at World's | | |
| 1905 | 133, 135 | A xiv | Fair | 80, 81 | ii |
| objects and machinery | 19 | B xiii | magnetite, analysis | 60 | ii |
| Plant of, erection | 17 | A xiii | | 202 | ix |
| | 18 | A xiv | quality | 191 | ii |
| | 17 | A xv | mining, early | 16 | ii |
| Pottery Co. | 29 | xii | notes by Blue | 59, 60 | ii |
| Bellhouse, T. W. | 127 | xi | notes by Vennor | 41 | ii |
| Bellin, N. | | | <i>See also</i> Blairton iron | | |
| Map by, of Canada, 1744 | 12, 13 | B xiv | mine, Ledyard iron | | |
| Belmont Bessemer Ore Co. | | | mine. | | |
| Capital and date of charter | 7 | vii | Molybdenite from, specimen | 57 | xii |
| Intention of, 1894 | 249 | iv | Old name of | 16 | ii |
| Lessees of Belmont iron mine | 59 | ii | Serpentine in | 209 | ix |
| Work by, Belmont mine | 236 | i | Belmore bay, STURGEON LAKE, TH. | | |
| Marmora village | 224 | i | B. AND R. R. D. | 37 | xii |
| gold mine, CORDOVA, BELMONT | | | Bay Gold Mg. Co. | | |
| TP., PETERBOROUGH CO. | | | Capital and date of charter | 37 | A xiii |
| Accidents at | 47, 48 | x | Work by, Sturgeon lake | 60 | A xvi |
| | 82, 83 | xi | <i>Beluga catodon.</i> | | |
| | 40, 41 | A xiii | Cornwall (near) | 217, 219, 224 | x |
| Exhibit of, at Pan-American | | | Belyea, C. W. | | |
| Exhibition | 85 | xi | Recorder, Kenora Mg. div. | 36 | A xvi |
| Idle, 1894 | 236 | iv | Report by, on Kenora Mg. div. 43, | 44 | A xvi |
| 1903 | 93 | A xiii | Bembrose, Thomas | | |
| 1904 | 76 | A xiv | Brick-yard of, Beeton, notes | 99 | B xv |
| 1905 | 88 | A xv | Ben Allen Portland Cement Co. | | |
| Mispickel absent in | 38 | iv | Capital and date of charter | 27 | A xvi |
| Notes on, 1891 | 224 | i | Bendigo (LATE SANDHURST), VIC., | | |
| 1892 | 237 | ii | AUSTRALIA. | | |
| 1897 | 89 | vii | School of mines at | 521 | R C |
| 1898 | 40, 41 | viii | Benfield, Thomas | | |
| 1899 | 92, 93 | ix | Deloro gold mine leased to | 264 | v |
| 1900 | 114, 115 | x | Bengal pres., E. INDIA. | | |
| 1901 | 15, 63, 234-236 | xi | Mica from, production, 1900 | 28 | xi |
| full description 188-192 | | xi | Benjamin, Felix | | |
| 1902 | 14, 111, 112 | xii | Benmiller, COLBORNE TP., HURON CO. | | |
| by Blue | 47-50 | iii | Brick-yard in | 70 | B xv |
| | 22 | viii | | | |

| | Page. | Vol. |
|--|---------------|------|
| Benn, Ira L. | | |
| Work by, 1900. | 160 | x |
| <i>See also</i> Benn cobalt mine. | | |
| Leslie | | |
| Olden zinc mine discovered by. . . | 54 A | xiii |
| cobalt mine , BUCKE TP., NIP. | | |
| Boring in, with Govt. drill. . . | 27, 28 A | xv |
| Cobaltite in, auriferous. | 23, 31 R | xiv |
| | 51 A | xvi |
| Sale of. | 11 A | xv |
| Work in, 1905. | 86 A | xv |
| Bennett, George | | |
| Corundum discovered by, Methuen tp. | 63 | vi |
| <i>See also</i> Bennett corundum mine. | | |
| Gold mining by, Balfour tp. | 236 | ii |
| Michipicoten | | |
| div. | 102 | vii |
| Zinc mining by, Balfour tp. | 33 | viii |
| corundum mine , METHUEN TP., PETERBOROUGH CO. | | |
| Mica in corundum of, photo. | 216, 217 | viii |
| Notes on, by Miller. | 228 | vii |
| | 206-211 | viii |
| lake , BATHURST TP., LANARK CO. | | |
| Hematite on. | 138 | R C |
| tp., R. R. D. | | |
| Gold mining in. <i>See</i> Independence mine. | | |
| Location of, description by Proudfoot. | 152 | v |
| Bennetts, Francis | 77 | vii |
| Benny Bros. | 119 | ji |
| Benson, Andrew | | |
| Gold mine of, Jaffray tp., 49, 108, 109 | vi | |
| | 57 | vii |
| fahlbands in. | 118 | vi |
| Henry | | |
| Gold prospecting by, Jaffray tp. | 186 | v |
| iron mine , PORT HENRY, N. Y. | | |
| Ball-Norton separator used in. | 328 | xii |
| results. | 339 | xii |
| Bentlck tp. , GREY CO. | | |
| Cement works in, <i>See</i> Durham, and Hanover. | | |
| Guelph formation in. | 50, 121 B | xiii |
| Limestone quarrying in. <i>See</i> Durham. | | |
| Marl in, analysis. | 50, 51 B | xiii |
| Bentley, (?) | | |
| Manager, Marmora iron works, 1866. | 322, 331 | R C |
| Norman S. | 132 | x |
| Benzine. | | |
| As a by-product of petroleum. | 158, 162, 165 | R C |
| Price of, 1890. | 164 | R C |
| Beraud, M. | 212 | ii |
| Berckau. | | |
| Cost given by, of making colour-glass in Saxony. | 77 B | xiv |
| Berg Co. | 46 B | xv |
| Bergakademie, Freiberg. <i>See</i> Freiberg. | | |

| | Page. | Vol. |
|--|----------|------|
| Berger, Nell | | |
| Discoverer of Golden Star mine. | 73 | vii |
| Manager, Randolph mine. | 272 | viii |
| | 68 | ix |
| | 83, 94 | x |
| Bergman, Torbern Olof | | |
| Nickel prepared by, 1775. | 163 c | xiv |
| Berlin, GERMANY. | | |
| Mining school at. | 513 | R C |
| Peat near. | 213 | il |
| notes. | 191 | i |
| Berlin, N. WATERLOO TP., WATERLOO CO. | | |
| Brickyard in, notes. | 104 B | xv |
| Bernays, J. | | |
| Nickel plant built by, in England. | 119 | viii |
| Berndorf, GERMANY. | | |
| German silver ware made at. | 176 c | xiv |
| Bernier, Joseph | 56 | xi |
| Berries. <i>See also</i> the various species. | | |
| Abitibi dist. | 188 | xii |
| | 253 A | xiv |
| Service. <i>See</i> Service berry. | | |
| Berry island, RAINY LAKE, R. R. D. | | |
| Rocks on. | 91 | iv |
| Berryman, J. B. | 64 | R C |
| William | 54 | iii |
| Berry's wharf, NEAR OTTAWA. | | |
| Cambro-Silurian near. | 37, 38 B | xiii |
| Berthelot, Pierre Eugene Marcelin. | | |
| Experiments by, on carbide of potassium. | 153 | iv |
| Views of, re origin of natural gas. | 141 | i |
| | 91, 92 A | xiv |
| Berthiaume, John | 55, 57 | xi |
| Berthier co., QUE. | | |
| Beryl and samarskite in. | 237 | vii |
| Bertie Natural Gas Co. | | |
| Notes on, 1890. | 135 | i |
| tp., WELLAND CO. | | |
| Limestone quarrying in. | 119 B | xiii |
| Natural gas in. | 135 | i |
| | 91 A | xiv |
| | 108 A | xv |
| logs of borings. | 102 A | xiv |
| Rocks in, Corniferous. | 46 | R C |
| Lower Helderberg. | 46 | R C |
| | 118 B | xiii |
| Onondaga. | 117 B | xiii |
| Bertram Engine Co. | | |
| Gold mining by, Regina bay. | 113 | vii |
| Berwick, FINCH TP., STORMONT CO. | | |
| Limestone near Chazy. | 110 B | xiii |
| | 47 B | xiii |
| Beryl. | | |
| Composition and crystallization of. | 228 | vi |
| Hardness of. | 202 | vi |
| Lyndoch tp., notes by Miller. | 234-237 | vii |
| photo. | 222, 223 | vii |
| Occurrences, Canada. | 237 | vii |
| | 195 | vi |
| Rainy lake. | 193 | ii |
| Rainy river. | 190 | ii |
| Specific gravity of. | 202 | vi |
| Bessemer, Sir Henry | | |
| <i>See also</i> Bessemer process. | | |
| Nickel alloys made by. | 105 c | xiv |
| Notes by, on making crucible steel. | 471 | R C |

| | Page. | Vol. |
|--|--------------|------|
| Bessemer Iron Mines of Ontario. | | |
| Exhibits of, at Buffalo..... | 25 A | xv |
| matte. | | |
| Analysis of unroasted..... | 106 | viii |
| ore. | | |
| Price of, at Cleveland, U.S., 1890, 234 | R C | |
| process. | | |
| Description of..... | 362-365 | R C |
| Effect of, on iron and steel indus- | | |
| try..... | 84, 126, 127 | ii |
| Minor ref. to..... | xxi | R C |
| Steel from, production:— | | |
| Great Britain, 1888..... | 224 | R C |
| United States, 1887-88..... | 224, 468 | R C |
| Besserer grove, NEAR OTTAWA. | | |
| Fossils from..... | 225 | x |
| wharf, NEAR OTTAWA. | | |
| Beach near, altitude..... | 227 | x |
| Leda clay at..... | 215, 216 | x |
| Best, James | | |
| Granite quarrying by, near Ban- | | |
| croft..... | 107 A | xv |
| Limestone quarry of, N. Cayuga | | |
| tp..... | 146 | xii |
| analysis... .. | 152 | xii |
| " 55, 118 B | xiii | |
| notes, | 55 B | xiii |
| Owner, Jeffry mine, Faraday tp. | 102 | xi |
| Bethea lake, ABITIBI DIST. | | |
| Jasper pebble found near..... | 115 A | xiii |
| Minor ref. to..... | 248 A | xiv |
| Notes on, by Kay..... | 111, 112 A | xiii |
| Rocks on, and near..... | 114, 119 A | xiii |
| dolerites..... | 219 A | xiv |
| "..... | 116 A | xiii |
| Bethlehem, PA. | | |
| Furnaces at, reason for location.. | 127 | ii |
| See also Bethlehem Iron Co. | | |
| Iron Co. | | |
| Armour plate of..... | 139 | ii |
| 156, 157, 162, 163 | iii | |
| cost..... | 144 | ii |
| ordered by Russia..... | 186 | iv |
| tests on..... | 136, 137 | ii |
| Correspondence between, and S. | | |
| J. Ritchie..... | 107, 108 | ii |
| Forgings made by, quality of.... | 189 | iv |
| Furnaces of, on Lehigh river.... | 118 | ii |
| Iron prospecting by, Matawin | | |
| river..... | 276 | v |
| Mining Co. | | |
| Iron mining by, Black lake, Bed- | | |
| ford tp..... | 134 | R C |
| Betteley, C. E. R. | 82 | x |
| <i>Betula glandulosa.</i> See Birch, dwarf | | |
| " <i>lutea.</i> See Birch, yellow | | |
| " <i>papyrifera.</i> See Birch, paper | | |
| " <i>pumilla.</i> | | |
| Abitibi dist..... | 241 A | xiv |
| Beven, George | | |
| Brick-making by, Hamilton.... | 106 B | xv |
| Beveridge lake, LOWER RIDEAU | | |
| LAKE. | | |
| Bog iron ore on..... | 142 | R C |
| Bewdley, HAMILTON TP., NORTHUM- | | |
| BERLAND CO. | 233 A | xiii |

| | Page. | Vol. |
|--|----------|------|
| Bexley tp., VICTORIA CO. | | |
| Cement works in. See Victoria | | |
| Road..... | | |
| Dolomite in, analysis..... | 114 B | xiii |
| See also Cobocok. | | |
| Peat works in. See Trent Valley | | |
| Peat Fuel Co. | | |
| Trenton formation in..... | 113 B | xiii |
| Bey, John..... | 234 | vii |
| Beyrichite. | | |
| Composition of..... | 170 | ii |
| B G 24, 25, 36, 37 gold locs. See | | |
| Pettigrew mine. | | |
| 43, 45 gold locs., ISLAND | | |
| FALLS REG., SEINE RIVER.... | 81 | ix |
| 155-159 gold locs., STURGEON | | |
| LAKE, TH. R. D..... | 40 | x |
| 138 gold loc. See Symmes, H. | | |
| D. | | |
| 170 gold loc., COUTURE LAKE, | | |
| TH. B. D..... | 86 | xii |
| Bibliography. | | |
| Arsenic..... | 121 | xi |
| Corundum..... | 230 | vii |
| Magnetic concentration of iron | | |
| ores..... | 337-342 | xil |
| Michigan dist..... | 186 | vii |
| "..... | 280 A | xiv |
| Bickerdike, Robert..... | 59 | ix |
| Bicycles. | | |
| Nickel-steel for..... | 166 C | xiv |
| Biddulph tp., MIDDLESEX CO. | | |
| Morainic hills in. See Lucan. | | |
| <i>Bidens cernua,</i> | | |
| Abitibi Lake dist..... | 241 A | xiv |
| Biella, PIEDMONT, ITALY. | | |
| Nickel in auriferous sands near.. | 151 C | xiv |
| Biernes, J..... | 102 | viii |
| Big bay, FRONTENAC CO. | | |
| Red granite near..... | 44 B | xiii |
| Cedar creek, ABITIBI RIVER. | | |
| Coal measures at mouth of..... | 169 A | xiii |
| Notes on, by Parks..... | 189 | viii |
| Surveys on, ref. to..... | 138 A | xiii |
| Cedar lake, BURLEIGH TP., | | |
| PETERBORO' CO. | | |
| Rocks in..... | 213 | viii |
| Chief lake, PONTIAC CO., QUE. | 228 | xi |
| creek, MIDDLETON TP., NOR- | | |
| FOLK CO. | | |
| Limestone in..... | 88 B | xiii |
| Dan arsenic mine, NET LAKE, | | |
| TIMAGAMI DIST., NIP. | | |
| Mill and concentrating plant at.. | 23 A | xv |
| photo... .. | 87 A | xv |
| Mispickel from, analysis..... | 23 B | xiv |
| Notes on, 1905..... | 87, 88 A | xv |
| by Coleman..... | 173 | ix |
| "..... | 105, 106 | xi |
| by Miller..... | 179 | x |
| Strike on, direction..... | 178 | ix |
| Working, 1904..... | 74 A | xiv |
| 1905..... | 30 B | xiv |
| Dick gold mine, MOSHER BAY, | | |
| MANITOU LAKE, R. R. D..... | 123 | vii |
| Dipper mine, NEAR MASSAGA | | |
| LAKE, FRONTENAC CO. | | |
| Notes on, 1905..... | 89, 90 A | xv |

| | Page. | Vol. | | Page. | Vol. |
|--|----------|------|--|----------|------|
| Big Dipper Mining and Milling Co. | | | Big Salmon lake, CASHEL TP., HAS- | | |
| Exhibits of, at Buffalo..... | 25 A | xv | TINGS CO..... | 163 A | xvi |
| Work by, 1905..... | 89 A | xv | Sandy lake, R. R. D. See San- | | |
| Ellen gold claim, NEAR MOORE | | | dy lake. | | |
| BAY, L. OF THE WOODS..... | 21 | iii | Six gold mine, EYE LAKE, R. | | |
| Forks, RAINY LAKE, U.S. | 164 | v | R. D. | | |
| Four copper mine, FOLEY TP., | | | Notes on, 1898..... | 91, 92 | viii |
| P. S. D. | | | 1899..... | 81 | ix |
| Notes on, by Coleman..... | 167, 168 | ix | Six Silver Cobalt mines. | | |
| Grassy peak, JUDITH MT., MO. | 190 | ix | Capital and date of charter..... | 20 A | xvi |
| Harry silver mine, PORT AR- | | | Stony portage, MICHIPICOTEN | | |
| THUR REG., TH. B. D..... | 199 | R C | RIVER, ALG. | | |
| island, KESAGAMI LAKE, NIP. | 148 A | xiii | Length of..... | 5 Bull. | iii |
| island, KABENUNG LAKE, MI- | | | 185..... | vii | |
| CHIPICOTEN DIV., ALG. | | | Morainic deposits at..... | 192 A | xv |
| Minor ref. to..... | 292 A | xiv | Notes on..... | 188 | vii |
| Monolith near..... | 329 A | xiv | Turtle lake, R. R. D. | | |
| Rocks on..... | 348 A | xiv | Waterpower near..... | 127 | vii |
| Jim iron mine, GRATAN TP., | | | Vermilion lake, R. R. D. See | | |
| RENFREW CO. | | | Vermilion lakes. | | |
| Notes on, 1902..... | 113, 114 | xii | Bighead river, GREY CO. | | |
| Levack mine. See Levack | | | Limestone on..... | 48, 49 B | xiii |
| properties. | | | Blgsby, Dr. John J. | | |
| Marsh lake, GRAND PORTAGE, | | | Aventurine feldspar described by..... | 195 | ix |
| MICHIPICOTEN DIV., ALG. | | | Beryls found by, Rainy lake.... | 237 | vii |
| Description of..... | 293 A | xiv | Historical notes by, re North- | | |
| Master gold mine, ANZHE- | | | West Co..... | 198 | v |
| KUMMING LAKE, R. R. D. | | | Nomenclature of Yellow-girl bay | | |
| Accident at, 1902..... | 46 | xii | explained by..... | 181 | v |
| 39, 40 A | xiii | | Notes by, on Kenora..... | 170 | v |
| Idle, 1906..... | 58 A | xvi | Rainy river..... | 208 | v |
| Minor ref. to..... | 14 | xii | Petalite reported by, Toronto.... | 206 | ix |
| Notes on, 1900..... | 98 | x | Staurolite reported by, N. of L. | | |
| 1901..... | 245, 246 | x | Superior..... | 210 | ix |
| 1903..... | 68 A | xiii | Surveys by, Mattawa river, ref. | | |
| 1904..... | 54 A | xiv | to..... | 81 B | xiii |
| 1905..... | 52 A | xv | Bigstone bay, LAKE OF THE WOODS, | | |
| Operated by Consolidated Mines | | | R. R. D. | | |
| Co..... | 16 | xiii | Contact veins near..... | 117 | R C |
| Photo..... | 256, 257 | xi | Gold mining on..... | 117 | R C |
| Producing, 1902..... | 15 | xii | 1892..... | 233 | ii |
| 1903..... | 4 A | xiii | 1896..... | 97, 98 | vi |
| Summer mining class at..... | 55 A | xiii | 1897..... | 111 | vii |
| Master Gold Mining Co. | | | <i>See also</i> Black Jack mine. | | |
| <i>See also</i> Big Master gold mine. | | | Dominion Gold Mfg and | | |
| Capital and date of charter..... | 25 A | xiv | Red. Co. | | |
| Mountain lake, W. OF L. NIP- | | | Gold Hill mine. | | |
| GON, TH. B. D. | | | Golden Gate mine. | | |
| Iron ore on..... | 314 | xii | Map of, showing gold locations. | | |
| Ore bed, BELMONT TP. See | | | Bilbao, SPAIN. | | |
| Blairton iron mine. | | | Iron ores of..... | 121, 122 | ii |
| Otter creek, DEREHAM TP., OX- | | | royalties. 19, 20, 26, 28, 30 | | i |
| FORD CO. | | | Bilberries (SASKATCHEWANS). | | |
| Artesian and oil wells near..... | 62 | i | Lake Superior, north shore..... | 147 | viii |
| Rabbit island, DOG LAKE. See | | | Billings, Elkanah | | |
| Rabbit island. | | | Estimate by, of iron ore in Hull, | | |
| rapid, MISSINAIBI RIVER, ALG. | | | Que., and on Rideau canal. 35, 36 | | ii |
| Coal near..... | 124 | iv | Fossils determined by, James | | |
| 162 A | xiii | | Bay dist..... | 44 | R C |
| analysis..... | 175 A | xiii | 31 B | xiii | |
| river, OPASATIKA RIVER, MIS- | | | F. | 102 | viii |
| SINAIBI RIVER, ALG. | | | Clapp & Co. | 122 | xi |
| Iron pyrites on..... | 243 | v | Bridge, NEAR OTTAWA. | | |
| 207 | ix | | Brick-yard at, notes..... | 60 B | xv |
| 149, 181 A | xvi | | Trenton formation at..... | 48 B | xiii |
| notes by Driver. 255, 256 | | v | pyrites mine, NEAR BROCK- | | |
| Ruby gold mine, WABIGOON | | | VILLE, LEEDS CO. | | |
| LAKE, R. R. D. | | | Early mining in..... | 149 A | xvi |
| Notes on, 1897..... | 124 | vii | | | |

| | Page. | Vol. |
|---|--------------|------|
| Bilson, Charles | | |
| Marble quarry of, Renfrew | 102 B | xiii |
| Bi-Metallic Mining and Development Co. | | |
| Capital and date of charter | 7 | vii |
| Wire rope tramway of | 352 | R C |
| Bimbowrie, S. AUSTRALIA. | | |
| Cobalt ore at | 70 B | xiv |
| Binbrook, BINBROOK TPL., WEST-WORTH CO. | | |
| Gas piped to | 106 A | xiv |
| Bindley Hardware Co. | 119 | ii |
| Bincomodai lake. <i>See</i> Partridge-crop lake. | | |
| Blogskuaga lake. <i>See</i> Shining-tree lake. | | |
| Biotite. | | |
| Analysis of | 83 A | xiv |
| Composition and colour of | 205, 226 | vi |
| Occurrences of | 195 | ix |
| Bitite-peridotite. | | |
| Michipicoten falls | 214 A | xiii |
| Birch. | | |
| Abitibi dist. 108, 109, 124 A | xiii | |
| 196-205, 222-235 A | xiv | |
| 125, 126 A | xv | |
| river and tribs. 178, 186, 193 | viii | |
| injured by insects. 129 A | xiii | |
| Black river and tribs. 184-186, 188 | xii | |
| Blanche river and vicinity | 174, 177-183 | xii |
| Fourth meridian and base line, R.R.d. 180, | 181 | vii |
| Garden River (near) | 197 | viii |
| Gypsum mt. 158 A | xiii | |
| Hudson Bay slope | 176 | vi |
| Jackfish bay, L. Superior | 189 | v |
| Lac des Mille Lacs | 113 | v |
| Lac Seul | 62 | v |
| Lake Huron slope | 170 | vi |
| Lake of the Woods | 170 | v |
| Mattagami lake, west of | 130 | ix |
| valley. 105, 106, 122, 123 A | xiii | |
| 192, 195 A | xiv | |
| 118-123, 144 A | xv | |
| diameter. 141-143, 152 A | xv | |
| Michipicoten div. 13 Bull | iii | |
| 189, 191 | vii | |
| 137, 206 | viii | |
| Goulais Bay reg. 150 | viii | |
| Tip-top mt. 142 | viii | |
| Moss tp. 79 | v | |
| Nighthawk lake | 176 | viii |
| Nipigon Lake region | 212 | x |
| Niven's base line and S. of | 141 | ix |
| Port Arthur and vicinity | 114 | ii |
| Porcupine lake | 176 | viii |
| Rainy Lake dist. 96 | iv | |
| river | 117 | iv |
| 207, 208 | v | |
| Shebandowan lake | 117 | v |
| Spanish river | 125 | ix |
| Speight's meridian line, E. of L. Superior | 201, 202 | viii |
| Sweden, for charcoal | 396 | R C |
| Timagami Lake dist. 57, | 58 | R C |
| Wabigoon lake (near) | 171 | vii |

Birch, black

| | | |
|---|---------------------|--------|
| McConkey tp. | 171 | ix |
| Mamainse pen. | 72 | iii |
| Shebandowan Lake dist. | 205 | v |
| canoe <i>See</i> Birch, paper | | |
| dwarf | | |
| Abitibi Lake dist. | 241 | A xiv |
| Mattagami valley. | 191 | A xiv |
| paper | | |
| Abitibi dist. | 125, 126 | A xiii |
| | 242 | A xiv |
| white | | |
| Abitibi dist. | 214-218, 223, 224, | |
| | 228, 231, 249-251 | A xiv |
| | 125 | A xv |
| Blanche River region | 215 | xi |
| | 179, 180 | xii |
| Fourth meridian line. | 181 | vii |
| Kenogami valley. | 112 | iv |
| Mattagami valley. | 118, 120, 136, 139 | A xv |
| | diameter. 127, 137, | |
| | 143, 152 | A xv |
| Michipicoten div. | 295 | A xiv |
| | 200 | A xv |
| | 172 | xii |
| Mississagi River region. | 159, | |
| Moisie river, Que., for iron smelt- | | |
| ing. | 491 | R C |
| Moose River basin. | 176 | A xiii |
| Nipigon Lake dist. | 112 | iv |
| | 138 | A xvi |
| Savant lake. | 88 | xi |
| Seine river. | 152, 153 | v |
| Shebandowan Lake dist. | 205 | v |
| Timagami Lake dist. | 56 | R C |
| yellow | | |
| Abitibi dist. | 227, 242 | A xiv |
| Eby tp. | 179 | xii |
| Michipicoten div. | 296 | A xiv |
| Aphis (INSECT). | | |
| Abitibi dist. | 129 | A xiii |
| case-bearer (INSECT). | | |
| Abitibi dist. | 128 | A xiii |
| island, LAC DES MILLE LACS, | | |
| Tn. B. D. | | |
| Indian camp on. | 113 | v |
| lake, FRONTENAC CO. | | |
| Iron ore on. | 134 | R C |
| Mica mining on. <i>See</i> next ref. | | |
| Lake mica mine, LOUGHBORO' | | |
| TP., FRONTENAC CO. | | |
| Accident at. | 48, 49 | x |
| Notes on. | 134 | x |
| portage, ABITIBI RIVER. | | |
| Notes on, by Parks. | 185 | viii |
| Bird, Henry | 58 | i |
| Birds. | | |
| Abitibi dist. | 189 | xii |
| | 126 | A xiii |
| | 243, 253 | A xiv |
| Bird lake, Nip. | 112, 119 | A xiii |
| Birds creek, HERSCHEL TP., HAST- | | |
| INGS CO. | | |
| Feldspar mining near. | 288 | viii |
| Birdsboro, PA. | 118 | ii |
| Birdseye formation. | | |
| Notes on, by Bell. | 41 | R C |
| Thickness of, in oil fields. | 96 | A xiv |
| Birge, Cyrus A. | 46 | v |

| | Page | Vol. | | Page | Vol. |
|--|----------|--------|---|-------------|----------|
| Birkinbine, John | | | Bismuth. — <i>Con.</i> | | |
| Extract from rep. by, on iron ore | | | Pays Plat, L. Superior | 190 | ii |
| in United States | 12 | i | Port Arthur dist. | 58 | B xiv |
| Notes by, on:— | | | Three A mine (near) | 57 | B xiv |
| Iron ores in Canada | 343-345 | R C | Price of | 234 | vii |
| Lanark co. | 323-334 | R C | Schneeberg, Saxony | 76, 77, 89, | 90 B xiv |
| Paper by, on locations for pig-iron | | | Specific gravity of | 201 | vi |
| production | 122-128 | ii | Uses of | 234 | vii |
| Radnor Forges furnace designed | | | glance. <i>See</i> Bismuthinite. | | |
| by | 25 | ii | silicate. <i>See</i> Eulytite. | | |
| Reference to work by, on mag- | | | Bismuthinite (Bismuth glance). | | |
| netic separation of iron ores | 338-340 | xii | Annaberg, Saxony | 61 | B xiv |
| Views of, <i>re</i> iron ores from La- | | | Frontenac co. | 203 | xi |
| vant tp. | 141 | R C | Barrie tp. | 234 | vii |
| mechanical treat- | | | | 195 | ix |
| ment of iron ores | | | | 77 | A xiv |
| | 85, 87 | ii | Hardness of | 202 | vi |
| Birmingham, JEFFERSON CO., ALA. | | | Joachimsthal, Bohemia | 61 | B xiv |
| Henderson steel converter used | | | Lyndoch tp. | 234 | vii |
| at | 488-490 | R C | | 195 | ix |
| Iron mining at, advantages of | 398 | R C | Mikado gold mine | 106, 113, | 195 |
| ores of district of, exhaustion | | | Notes on, by Goodwin | 209, 210 | vi |
| possible | 8 | A xiii | Specific gravity of | 202 | vi |
| Birmingham, CONN. | | | Tudor tp. | 234 | vii |
| Rise of price of land in | 111 | ii | | 195 | ix |
| Water power at | 485 | R C | | 203 | xi |
| Birmingham, WARWICKSHIRE, ENG. | | | Bissell & Co. | 119 | ii |
| Nickel refinery at | 175 | C xiv | Bittern. | | |
| Science school at | 512 | R C | Abitibi dist. | 189 | xii |
| Iron and Steel Co. | 118 | ii | least | | |
| Biron, S. | 102 | vii | Abitibi dist. | 253 | A xiv |
| Bisbee, COCHISE CO., ARIZONA. | | | lake, MACGREGOR TP., TH. B. D. | | |
| Azurite from | 212 | vi | Iron bearing rocks near | 259, 260 | A xiv |
| Biscay prov., SPAIN. | | | lakes, NIVEN'S BASE LINE, ALG. | 138 | ix |
| Mining lands in, ownership of | 25 | i | Bitter-spar. <i>See</i> Pearlspar. | | |
| Bishop, John. | 47, 50 | x | Bitumen. <i>See</i> Asphaltum. | | |
| Thomas | | | Bituminous coal. <i>See</i> Coal. | | |
| Jasper found by, Batchawana | | | limestone. <i>See</i> Limestone, bit- | | |
| river | 190 | x | uminous | | |
| Licence to | 102 | vii | shale. | | |
| Indian reserve, R.R.D. | 167 | v | Collingwood, analysis | 109 | B xiii |
| of Moosonee. <i>See</i> Newnham, | | | Kettle pt., analysis | 156 | xii |
| Very Rev. J. A. | | | Port Dover | 119 | B xiii |
| "Bishops-court," MOOSE FACTORY. | | | slate. <i>See</i> Hamilt'n formation. | | |
| Photo of | 200, 201 | viii | Biwabik iron mine, MESABI IRON | | |
| Biskotasing, ALG. | | | RANGE, U.S. | | |
| Jasper north of | 187 | x | Notes on, by Coleman | 153 | ix |
| Rocks on route from, to Flying | | | BJ 111-114 gold locs. <i>See</i> Jack Lake | | |
| Post | 106 | xii | mine. | | |
| Bismarck, BURLEIGH CO., N. DAK. | | | BJ 130 iron loc., NEAR PEWABIC | | |
| Experiments at, on lignite | 28 | A xiii | LAKE, R.R.D. | 130 | xi |
| Bismite (BISMUTH OCHRE). | | | Black, D. W. | | |
| Hardness of | 201 | vi | Gold mining by, Minnitaki dist. | 64 | ix |
| Lyndoch tp. | 195 | ix | J. F. | | |
| Notes on, by Goodwin | 209 | vi | Mining by, Michipicoten div. | 102 | vii |
| Specific gravity of | 201 | vi | | 102 | viii |
| Bismuth. | | | Mispickel reported by, Davis tp. | 106 | xi |
| Barrie tp. | 77 | A xiv | Prof. James G. | | |
| Cobalt dist. | xi | A xiii | Chemistry professor, Otago, N Z. | | |
| | 12, 13 | B xiv | 513, 515, 520, 521 | | R C |
| analysis | 22 | B xiv | Report by, on Otago School of | | |
| Bucke tp. | 27 | B xiv | Mines | 516-519 | R C |
| Foster apatite mine | 45 | A xv | L. | 102 | viii |
| Hardness of | 201 | vi | Thomas | 55 | viii |
| Hastings co. | 193 | ii | William | | |
| Tudor tp. | 195 | ix | Iron prospecting by, Mississagi | | |
| Joachimsthal, Bohemia | 61 | B xiv | river | 162 | xii |
| Ores of, notes by Goodwin | 209, 210 | vi | | | |

| | Page. | Vol. |
|---|-------------|---------|
| Black and Burgess. | | |
| Granite quarrying by, Willets-holm..... | 297 | xi |
| Bass lake, E. of L. of THE Woods | 185 | v |
| bay, LAKE SUPERIOR. | | |
| Copper on, chalcopryrite..... | 196 | ix |
| mining..... | 86 | ix |
| | 109 | x |
| | 275 | xi |
| | 78 A | xiii |
| | 29 A | xiv |
| Galena on..... | 175 | i |
| | 10, 36, 37, | 147 R C |
| | 198 | ix |
| Gold on..... | 39 | iv |
| discovery..... | 114 | R C |
| Iron ore on, titanite..... | 189 | v |
| Jasper quarrying on..... | 100 | i |
| Reeks on and near..... | 129 | vi |
| granite for quarrying..... | 62 | R C |
| quality..... | 205 | R C |
| Keweenaw..... | 39 | iv |
| limestone..... | 112 B | xiii |
| dolomite, quarrying..... | 100 | i |
| Nipigon formation..... | 36, 37 | R C |
| sandston..... | 189 | v |
| trap..... | 15 | v |
| Bay (OR WILLIAMS) iron mine, BAGOT TP., RENFREW CO. | | |
| Notes on, by Folger and Grady..... | 135, 136 | R C |
| Bay Mine and Quarry Co. | | |
| Notes on work by, 1890..... | 100 | i |
| Quarries of, notes on..... | 112 B | xiii |
| Bay Mining Co. | | |
| Capital and date of charter..... | 9 | xii |
| Work by, 1901..... | 275 | xi |
| 1903..... | 78 A | xiii |
| 1904..... | 29 A | xiv |
| Cat Mining Co. | | |
| Crown Point mine bought by..... | 61 A | xiii |
| copper. See Melconite. | | |
| creek, KENOGAMI LAKE, ELY TP., NIP. | 248 A | xiv |
| Diamond Steel Works. | | |
| Labour employed by, statistics..... | 370 | R C |
| Donald graphite mine, WHITE-FISH LAKE, BROUGHAM TP., RENFREW CO. | | |
| Discovery of..... | 34 | vi |
| Flooded, 1902..... | 12, 92 A | xiii |
| Leased to McConnell..... | 22 A | xiv |
| Notes on, 1895..... | 30, 37 | v |
| 1900..... | 24 | x |
| 1901..... | 27, 292, | 293 xi |
| 1902..... | 26, 132-134 | xii |
| 1905..... | 106 A | xv |
| Output of, 1897..... | 23 A | xv |
| 1898..... | 23 | vii |
| 1905..... | 18 | viii |
| Photo of plant..... | 289, 290 | xi |
| | 176, 177 A | xiii |
| Prospects, good..... | 14 | ix |
| Summer mining class at..... | 53, 54 A | xiii |
| Tramway from, to railway, sug-gested..... | 55 | xii |
| Unwatered and worked..... | 86, 87 A | xiv |
| Waterpower for..... | 14 A | xv |

Black Eagle Gold Mining Co.

See also Regina gold mine.

| | | |
|---|----------------|--------|
| Capital and date of charter..... | 11 | xi |
| Extravagant mining by..... | 96 | xii |
| Regina mine worked by..... | 16, 154 | xi |
| | 57 A | xv |
| Summer mining class at..... | 59 | xii |
| flies. See Flies, black | | |
| Fox gold mine, NEAR RA-LEIGH, R. R. D. | 123 | vii |
| Fox silver mine, PORT AR-THUR DIST., TH. B. D. | 96 | xii |
| Hawk Gold Mining Co. | | |
| Capital and date of charter..... | 9 | ix |
| Hills, S. DAKOTA. | | |
| Columbite in, with tin, beryl and feldspar..... | 236, 237 | vii |
| Gold in, mode of occurrence..... | 71 | iv |
| Plutonic plugs of..... | 157 | vii |
| "Black Jack." See Zinc blende. | | |
| Jack gold mine, BIGSTONE BAY, L. OF THE WOODS. | | |
| Acquired by Britannia Con'd G. M. Co..... | 43 | ix |
| Depth of, 1899..... | 35 | ix |
| Locations of..... | 174, 175 | v |
| Map of..... | 173 | v |
| Notes on, 1895..... | 177 | v |
| 1896..... | 50, 98, | 251 vi |
| 1897 (idle)..... | 37, 112 | vii |
| by Coleman..... | 68 | iv |
| Jack Mining Co. | | |
| Bull-dog mine, L. of the Woods, worked by..... | 25, 26 | iii |
| Jack Zinc Syn. | | |
| Capital and date of charter..... | 9 | x |
| Lake, MEGANTIC CO., QUE. | | |
| Asbestos from, quality..... | 97 | iii |
| lake, BEDFORD TP., FRONTENAC CO. | | |
| Iron ore on..... | 134 | R C |
| | 34, 37 | ii |
| -lead. See Graphite. | | |
| oxide of manganese. See Py-rrolusite. | | |
| River, JEFFERSON CO., N. Y. | | |
| Black River formation named after..... | 41 | R C |
| Blast furnace at..... | 393 | R C |
| river, ABITIBI RIVER. | | |
| Description of, by Bolton..... | 185, 187 | xii |
| Kay..... | 109, 114 A | xiii |
| Falls on, photo..... | 128, 129 A | xiii |
| Glacial striae on..... | 115 A | xiii |
| Indian wigwam on, photo..... | 128, 129 A | xiii |
| Mouth of, photo..... | 215 A | xiv |
| Notes on, by Parks..... | 180 | viii |
| Rocks on..... | 192 | viii |
| dolerite..... | 117 A | xiii |
| porphyritic..... | 120 A | xiii |
| Route from, to Fort Matachewan..... | 110 A | xii |
| Wataybeeg lake..... | 113 A | xii |
| Soil from, character..... | 130, 131 A | xiii |
| Trees along..... | 115, 124-126 A | xiii |
| | 184-188 | xii |
| Waterpower on..... | 185 | xii |
| river, L. OF THE WOODS. | | |
| Huronian schists on..... | 103 | vi |
| river, RAINY RIVER, MINN. | 166 | v |

| | Page. | Vol. | | Page. | Vol. |
|---------------------------------------|------------|---------|---|------------|------|
| Black river, L. SUPERIOR. | | | Black Sturgeon river.—Con. | | |
| Building stone on..... | 61 | R C | Rocks on and near:— | | |
| Chalcopyrite on..... | 196 | ix | arkose..... | 145 A | xvi |
| Molybdenite on..... | 61 | R C | Iron f. rmation..... | 143 A | xvi |
| Selenium on..... | 209 | ix | Keweenawan and trap..... | 37 | R C |
| river, SEVERN RIVER. |  |  | ..... | 147 A | xvi |
| Limestone on..... | 89, 90 | B xiii | Roses along..... | 139 A | xvi |
| River formation. | | | Sand plains on..... | 135, 148 A | xvi |
| Black River, N.Y..... | 61 | R C | Sturgeon in..... | 139 A | xvi |
| Carleton co..... | 37 | B xiii | Black Trout lake, MAGPIE RIVER, | | |
| Distribution of..... | 24, 27 | B xiii | ALG. | | |
| and character, notes | | | Rocks on and near..... | 164, 166 | xi |
| by Bell..... | 111 | R C | Doré conglomerate..... | 344, 345 A | xiv |
| Dundas co..... | 40 | B xiii | petrography..... | 340, 341 A | xiv |
| Frontenac co..... | 44 | B xiii | Huronian..... | 348 A | xiv |
| Glengarry co..... | 46 | B xiii | Blackall, John | | |
| Hastings c..... | 186 | xi | Mica mining by, Burgess tp..... | 132 | x |
| ..... | 60 | B xiii | Blackash creek, VERMILION RIVER, | | |
| Marmora tp..... | 194 | xi | NIP. | | |
| Lithographic stone in, notes on.. | 6 | B xiii | Huronian on..... | 169 | vi |
| Peel co..... | 95 | B xiii | Blackband ironstone. | | |
| Peterborough co..... | 97 | B xiii | Scotland..... | 22 | i |
| Methuen tp..... | 210 | viii | Blackbird, rusty | | |
| Position of, in Silurian..... | 2 | R C | Abitibi dist..... | 126 A | xiii |
| ..... | 22 | B xiii | Blackburn, Joe | | |
| Prescott co..... | 98 | B xiii | R..... | 125 | v |
| Renfrew co..... | 104 | B xiii | Russell | | |
| Russell co..... | 107, 108 | B xiii | Mica factory of, Ottawa..... | 106 A | xv |
| Simcoe co., Couchiching lake.... | 90 | B xiii | ..... | 91 A | xvi |
| Midland..... | 110 | B xiii | lake, NIP. | | |
| Stormont c..... | 110 | B xiii | Description of..... | 112 A | xiii |
| Victoria co..... | 113 | B xiii | Rocks on, dolerites..... | 116 A | xiii |
| Black Rock, NEAR BUFFALO, U.S. | | | strike..... | 121 A | xiii |
| Corniferous formation at, thick- | | | Blacker, William | | |
| ness..... | 156 | i | Brick-yard of, Brantford, notes.. | 58 B | xv |
| Mining Co. | | | Blackford Oil and Gas Co. | | |
| Capital and date of charter..... | 5 | xii | Exhibits of, at Buffalo..... | 25 A | xv |
| Sturgeon gold mine, BLACK | | | Blackheath, BINBROOK TP., WENT- | | |
| STURGEON LAKE, R R.D. | | | WORTH CO. | | |
| Accident at..... | 28-30 | ix | Gas piped to..... | 106 A | xiv |
| Depth of, 1899..... | 35 | ix | Blackie, F. | | |
| Huronian-Laurentian contact in.. | 110 | vii | Gold mining by, Eagle lake..... | 96 | x |
| Notes on, 1898..... | 57, 58 | vii | Blackinton, A. B. | | |
| 1899..... | 37, 38 | ix | Gold mining by, Michipicoten | | |
| lake, L. OF THE | | | div..... | 102 | vii |
| WOODS DIST. |  |  | ..... | 102 | viii |
| Contact Huronian—Laurentian |  |  | ..... | 115 | ix |
| on..... | 110 | vii | ..... | 139, 140 | x |
| Gold mining near..... | 6 | Bull. i | ..... | 73 | xi |
| See also Black Sturgeon g.m. |  |  | ..... | 65 | xii |
| Iron ore near..... | 29 | iii | C. B. | | |
| lake, S. W. OF L. |  |  | ..... | 65 | xii |
| NIPIGON. | | | Blacksmith rapid, ABITIBI RIVER. | | |
| Iron ore near, analysis..... | 312 | xii | Clay from, analysis..... | 160 A | xiii |
| hematite..... | 311 | xii | Lignite on..... | 188, 189 | vii |
| notes by A. Wilson..... | 311 | xii | photo..... | 176, 177 A | xiii |
| Mining Co. | | | report by J. M. Bell..... | 169-172 A | xiii |
| Capital and date of charter..... | 7 | vii | section..... | 173 A | xiii |
| river, NIPIGON | | | sketch map showing..... | 171 A | xiii |
| LAKE, TH. B. D. | | | Rocks on, of glacial age..... | 143 A | xiii |
| Beaches on..... | 137 A | xvi | Blackstone, W. A. | | |
| Iron ore on..... | 115-118 A | xvi | ..... | 91 | xii |
| boring for..... | 311 | xii | Blackwater river, NIPIGON LAKE, | | |
| hematite..... | 22 | R C | TH. B. D. | | |
| jasper with..... | 200, 214 | x | Jasper on..... | 311 | xii |
| Marl on..... | 37 | R C | Rocks near mouth of..... | 214 | x |
| Photos of..... | 116, 118 A | xvi | Blackwood, William | | |
|  |  |  | ..... | 80 | viii |
| | | | Blair, Dr. | | |
| | | | R. See Blair mica mine. | 46 | xii |
| | | | W. G. | | |
|  |  |  | ..... | 53 A | xvi |

| | Page. | Vol. |
|--|--------------|------|
| Blair, W. J. | | |
| Part owner, University mine | | |
| Cobalt | 85 A | xv |
| Refs. to surveys by, Cobalt dist. | 7 A | xvi |
| Blair co., PA. | | |
| Limestone from, analysis..... | 6 B | xiii |
| Blair mica mine, BATHURST TP., LANARK CO. | | |
| Notes on, 1901..... | 290 | xi |
| Blairton, BELMONT TP., PETERBOROUGH CO. | | |
| Country north of, character.... | 232 A | xiii |
| Iron mining at, 1820 | 321 | R C |
| See also Blairton iron mine. | | |
| iron mine, CROW LAKE, BELMONT TP., PETERBOROUGH CO. | | |
| Anticlinal and synclinal fold in.. | 51 | ii |
| Early operations at..... | 16, 21 | ii |
| Notes on, by Ledyard..... | 130 | R C |
| Macfarlane..... | 40 | ii |
| Merritt | 127, 130 | R C |
| Murray..... | 37, 38 | ii |
| Vennor..... | 43 | ii |
| Ore of, analysis | 54, 55 | ii |
| character | 141 | xi |
| Blake, Prof. L. J. | | |
| Ore dressing process of, description | 330 | xii |
| George W..... | 99 | vii |
| W. P. | | |
| Notes by, on use of nickel | 382 | R C |
| =Morscher system. See | | |
| Blake, Prof. L. J. | | |
| tp., TH. B. D. | | |
| Diabase in, petrography..... | 179 | ix |
| Copper locations in..... | 85, 146, 147 | ix |
| Blakely, E. A. | 102 | vii |
| Blaksley—? | 58 A | xv |
| Blanch Down, CORNWALL, ENG. | | |
| Effect of arsenical fumes around. | 61 | iii |
| Blanchard, J. | | |
| Brickyard of, Penetanguishene, notes on..... | 100 B | xv |
| J. A..... | 122 | xi |
| Blanche river, L. TIMISKAMING. | | |
| Copper on..... | 24 | R C |
| | 193 | viii |
| Course of | 35, 36 B | xiv |
| Description of, by Miller.... | 214-216 | xi |
| south branch..... | 225-226 | xi |
| Explorations on and near, report by Bolton..... | 173-181 | xii |
| Fish in | 221 | xi |
| Galena near | 25 B | xiv |
| Gold reported on..... | 193 | viii |
| Rocks on | 230 | xi |
| Niagara formation..... | 32 B | xiv |
| petrographical notes..... | 228 | xi |
| Waterpower on | 188 | xii |
| | 14 A | xv |
| River Mg. Co. | | |
| Exhibits of, at Buffalo..... | 25 A | xv |
| Operating in Hudson tp..... | 54 A | xvi |
| Blanford, Dr. W. Thomas. | 144 | vii |
| Blanshard tp., PERTH CO. | | |
| Limestone in..... | 96 B | xiii |
| boring in..... | 51-53 | xii |
| See also St. Marys. | | |

Blast furnace.

| | | |
|--|---------|-----|
| See also Smelters, Deseronto, | | |
| Hamilton, Marmora, Midland, | | |
| Port Arthur, etc. | | |
| Canada, first record of..... | 255 | R C |
| See also Radnor Forges. | | |
| Charcoal iron for..... | 479-484 | R C |
| Collingwood, projected..... | 17 | ix |
| | 25 | x |
| Comparison with reverberatory furnace..... | 375 | R C |
| England, number of, 1882..... | 398 | R C |
| Husafvel, notes on the..... | 486-488 | R C |
| Kingston, projected..... | 17 | ix |
| Ores for, preparation of..... | 475-478 | R C |
| Peat as fuel for..... | 206-209 | i |

Bleaching powder.

| | | |
|---|-----|-----|
| See also Alkali works. | | |
| Chloride of lime. | | |
| Manufacture of, at Sault Ste. | | |
| Marie..... | 66 | xi |
| Sulphuric acid for making | 256 | v |
| Bleichert wire rope system. ... 351, 352 | | R C |

Blende. See Zinc blende.

| | | |
|---------------------------------------|-------|-----|
| lake, MACGREGOR TP., TH. B. D. | | |
| Zinc-blende and galena on..... | 170 A | xv |
| | 209 | ix |
| | 30 | R C |

Blenheim, HARWICH TP., KENT CO.

| | | |
|-------------------------------|----------|-----|
| Artesian well south of..... | 59 | i |
| Brick-yard at | 72 B | xv |
| Country around, notes on..... | 102 A | xvi |
| Gas in, boring for..... | 126, 127 | i |

Blenheim and Harwich Oil Co.

| | | |
|----------------------------------|------|------|
| Capital and date of charter..... | 37 A | xiii |
|----------------------------------|------|------|

Blessington apatite mines, EAGLE

| | | |
|-------------------------------------|----------|-----|
| AND ST. GEORGE LAKES, FRONTENAC CO. | | |
| Evidence re, before R.C..... | 172, 173 | R C |

Blewett, William

| | | |
|-------------------------------|-----|------|
| Manager, Cheney copper mine.. | 149 | viii |
| Stobie nickel mine.... | 230 | i |
| | 245 | ii |

Blezard lake. See Whitson lake.

| | | |
|--|--------------|-----|
| nickel mine, BLEZARD TP., NIP. | | |
| Accident at, 1892 (special report) | | |
| | 255, 256 | ii |
| 1893..... | 167, 176 | iii |
| Depth of..... | 20 C | xiv |
| Discovery of..... | 134 C | xiv |
| Notes on, 1891 | 231 | i |
| 1892 | 247 | ii |
| 1893 | 185 | iii |
| 1894 (idle)..... | 247 | iv |
| 1895 (idle)..... | 273 | v |
| 1902..... | 254-256, 286 | xii |
| Ore deposits of, character..... | 278 | xii |
| proportion of nickel and copper in | 90 | i |
| | 280 | xii |
| | 152 C | xiv |
| Plan of and vicinity..... | 255 | xii |
| Production | 156 C | xiv |
| Railway to..... | 136 C | xiv |
| Rocks in and near | 60 C | xiv |
| arkose | 92 C | xiv |
| granite | 81 C | xiv |

| | Page. | Vol. | | Page. | Vol. |
|--|---------------|------|---|------------|------|
| Blezard lake.—Con. | | | "Blotched diorite." | | |
| Rocks in, greenstone..... | 76 | i | Parry Sound dist..... | 93, 94 B | xiii |
| micro-norite..... | 81 C | xiv | <i>Blotrophylthum decorticatum</i> | 146 | xii |
| nickel bearing, analysis..... | 212 A | xiii | Cayuga, N. tp..... | 35 | xi |
| norite..... | 110, 112 C | xiv | Port Colborne (near)..... | 143 | xii |
| analysis..... | 116, 117 C | xiv | Villanova and Rockford..... | 25, 26 | ix |
| notes by Coleman..... | 55-57 C | xiv | Blouquest, William | | |
| quartz-hornblende..... | 292 | xii | Blue, Archibald | | |
| Stockwork in..... | 19 C | xiv | Appointed in charge of census of | | |
| Worked by Dominion Mg. Co... tp., SUDBURY DIST., NIP. | 142 C | xiv | Canada..... | 5 | X |
| Copper in..... | 24 | R C | on Roy. Com..... | 10 | R C |
| chalcopryrite..... | 196 | ix | Blueite called after..... | 169, 192 | ii |
| mining, 1899..... | 98 | ix | Explorations by, L. of Woods, ref. to..... | 68 | iv |
| Clay band in..... | 105 C | xiv | Michipicoten | | |
| Iron in, boring for..... | 214 A | xiii | div..... | 202 | vii |
| Nickel in :— | | | ref. to..... | 172 | viii |
| See also Blezard mine. | | | N. of L. Su- | | |
| Beatrice mine. | | | perior, ref to | 126 | viii |
| Cameron mine. | | | Timagami dist. | 172 | ix |
| Little Stobie mine. | | | Instructions by, to Coleman <i>re</i> | | |
| Mount Nickel mine. | | | Michipicoten iron range..... | 255 | viii |
| Stobie mine. | | | Letter by, to Bow <i>re</i> Golden Star | | |
| boring for..... | 214 A | xiii | g. m..... | 263 | viii |
| notes by Bell..... | 433 | R C | Magnetic concentration of iron | | |
| Rocks in: | | | ore advocated by..... | 332 | xii |
| crystalline schists..... | 80 | i | Notes by, on discovery of anth- | | |
| granite..... | 83 C | xiv | racite, Rallour tp..... | 1, 3 Bull. | ii |
| nickel eruptive..... | 62, 111 C | xiv | Papers by: | | |
| norite..... | 242 | xii | 1890. Report of the Commis- | | |
| Whartontite in..... | 211 | ix | sioners to Lieutenant- | | |
| Valley, BLEZARD TP., NIP. | | | Governor..... | xi-xxiv | R C |
| Agricultural land near..... | 106 C | xiv | Mining Laws and Reg- | | |
| Blight, Ulrich | 33 | vii | ulations..... | 255-318 | R C |
| Blind River, COBDEN TP., ALG. | | | The smelting of ores of | | |
| Copper claims north of..... | 98 | xii | economic minerals in | | |
| Blind (OR PENEWABECONG) river, L. | | | Ont..... | 319-406 | R C |
| HURON. | | | Measures for aiding and | | |
| Huronian from, to Sault Ste. | | | encouraging mineral | | |
| Marie..... | 157 | viii | development..... | 407-429 | R C |
| Lumbering on..... | 119 | iv | Technical instruction..... | 491-524 | R C |
| Blindfold lake, L. OF THE WOODS | | | 1891. Minerals of Ontario..... | 165-179 | i |
| DIST. | | | Natural gas..... | 115-164 | i |
| Gold mining on..... | 111 | vii | Structural materials..... | 95-114 | i |
| Bliss mica mine, S. BURGESS TP., | | | 1892. Facts and opinions of the | | |
| LEEDS CO. | | | iron industry..... | 96-122 | ii |
| Notes on, 1901..... | 290 | xi | Iron-making in Ontario..... | 12-30 | ii |
| Block, Mrs. Fred | 222 | vii | Iron ores of Ontario..... | 30-82 | ii |
| | 246 | viii | Mining Laws of Ont..... | 221-229 | ii |
| Blomidon cape, KINGS CO., N.S. | | | Nickel and copper..... | 128-148 | ii |
| Amethyst and chalcedony at..... | 223, 224 | vi | Treating iron ores and | | |
| Blonquist, Gustavus | 238 | v | metallic iron..... | 83-96 | ii |
| Blood-stone (HELIOTROPE). | | | 1893. Actinolite, asbestos and | | |
| Definition of..... | 529 | R C | talc..... | 89-102 | iii |
| Bloom tp., LOGAN CO., OHIO. | | | Copper at Point Ma- | | |
| Natural gas in, depth and press- | | | mainse..... | 62-68 | iii |
| ure..... | 155 | i | Diamond drills..... | 164-166 | iii |
| Bloomfield, C. J. | 104 | xi | Gold fields of Ontario..... | 12-61 | iii |
| Bloomington, McLEAN CO., ILL. | | | Iron trade in the United | | |
| Paving clay from, analysis..... | 120 | iii | States..... | 144, 145 | iii |
| Streets of, paved with | | | Kingston School of Min- | | |
| brick..... | 106, 112, 113 | iii | ing..... | 178-180 | iii |
| Blossom lake, KEKEK BROOK, MATA- | | | Lithographic stone..... | 136, 137 | iii |
| WIN RIVER, R.R.D. | | | Nickel-steel for armour..... | 147-163 | iii |
| Granite on..... | 129 | v | 1894. Calcium carbide and | | |
| lake, SIEBANDOWAN LAKE REG., | | | acetylene gas..... | 139-141 | iv |
| THE B. D. | 130 | v | Diamond drill Explora- | | |
| | | | tion..... | 167-176 | iv |

| | Page. | Vol. |
|---|-------|------|
| Blue, Archibald.—Con. | | |
| 1894. Nickel and its uses... 176-198 | iv | |
| Summer Mining Schools. | | |
| 216-222 | iv | |
| 1895. Mining Schools.... 211-220 | v | |
| On a tour of inspection | | |
| in Western Ontario. 107-190 | v | |
| ref. to..... 4 | v | |
| The New Ontario.... 191-211 | v | |
| 1896. Mining Schools.... 193-198 | vi | |
| Silver islet..... 125-157 | vi | |
| 1897. Mining Schools.... 259-265 | vii | |
| 1898. Corundum in Ont.... 241-249 | viii | |
| 1899. Mining Laws of Ont. 225-229 | ix | |
| On Diamonds in Ont. 119-124 | ix | |
| Reports by, as Director: | | |
| 1891..... 1-61 | i | |
| 1892..... 1-12 | ii | |
| 1893..... 1-11 | iii | |
| 1894..... 1-34 | iv | |
| 1895..... 1-46 | v | |
| 1896..... 1-70 | vi | |
| 1897..... 1-34 | vii | |
| 1898..... 1-28 | viii | |
| 1899..... 1-34 | ix | |
| Work by, 1895... 4, 74, 75 | v | |
| Wilson..... 107 | v | |
| 102, 187, 197 | vii | |
| carbonate of copper. See Azurite. | | |
| colour. See Cobalt glass. | | |
| flags. | | |
| Abitibi dist. Nip..... 253 A | xiv | |
| lake, BEDFORD TP., FRONTENAC CO. | | |
| Apatite mining on..... 245 | i | |
| lake, DUMFRIES TP., BRANT CO. | | |
| See also Ontario Portland Cement Co. | | |
| Cement works on..... 17 A | xiii | |
| 18 B | xiii | |
| 18 A | xiv | |
| Marl in..... 33, 149 | xii | |
| 34 B | xiii | |
| 154 A | xiv | |
| lake, LOUGHBOROUGH TP., FRONTENAC CO. | | |
| Mica prospecting near..... 92 A | xiii | |
| Rocks in vicinity of..... 288 | xi | |
| lake, MACLENNAN AND CAPREOL TPS., NIP. | | |
| Glaciation near..... 102 c | xiv | |
| Iron pyrites on..... 158 c | xiv | |
| Gravel plains south of..... 75 c | xiv | |
| Minor ref. to..... 289 | xii | |
| Nickel on..... 15, 73, 74 c | xiv | |
| mining. See Blue Lake nickel mine. | | |
| Ores in region of, character..... 274 | xii | |
| Pyrite crystals in ore of..... 281 | xii | |
| Pyrrhotite from..... 237 | xii | |
| Rocks on and near..... 203 A | xiii | |
| 10, 115 c | xiv | |
| dialbase..... 298 | xii | |
| 85 c | xiv | |
| nickel eruptive... 284 | xi | |
| 273 | xii | |
| norite..... 112 c | xiv | |
| structure..... 81 c | xiv | |

| | Page. | Vol. |
|---|-------|------|
| Blue lake, MICHIPICOTEN DIV., ALG. | | |
| Nomenclature of..... 197 | vii | |
| lake, VERMILION RIVER, NIP. | | |
| Gold near, alluvial..... 155 | x | |
| Rocks on and near..... 156 | x | |
| Huronian, photo..... 155 | x | |
| Lake Cement Co. | | |
| Brick-clay for, from Harrisburg. 115 B | xv | |
| Lake nickel mine, MACLENNAN TP., NIP. | | |
| Notes on, 1901..... 284-286 | xi | |
| Rocks on..... 273, 274 | xii | |
| malachite. See Azurite. | | |
| mnts., PETERBOROUGH CO. | | |
| Corundum in..... 210 | viii | |
| 193 | xi | |
| Muscovite in..... 91 A | xiii | |
| Notes on, by Miller..... 214 | viii | |
| Rocks of..... 208-212, 222 | viii | |
| granite..... 194 | xi | |
| Niagara formation..... 44 | R C | |
| nepheline-syenite, analysis..... 207 | viii | |
| Terraces on..... 151, 152 | viii | |
| altitude..... 177 | ix | |
| Mountain escarpment, PETERBOROUGH CO. | | |
| Niagara formation at..... 49 B | xiii | |
| Notes on, by Coleman..... 122 | viii | |
| Bluebell gold claim, N. OF LARDER, NIP. | | |
| Rocks on and near, photo..... 208 A | xvi | |
| Blueberries. | | |
| Abitibi Lake dist..... 241 A | xiv | |
| Black and Blanche rivers..... 188 | xii | |
| Lac Seul..... 85 | v | |
| Lake Superior, north shore..... 147 | viii | |
| late growth... 85 | v | |
| Mattagami valley..... 150 A | xiv | |
| Michipicoten dist..... 188 | vii | |
| 200 A | xv | |
| Tip-top mt..... 142 | viii | |
| White River, date..... 139 | viii | |
| Montreal river..... 200 | viii | |
| Peat bogs of Germany..... 213 | ii | |
| Rainy Lake region..... 96 | iv | |
| sold by Indians..... 97 | iv | |
| Blueite. | | |
| See also Whartonite. | | |
| Description and analyses, by Emmons..... 168-170 | ii | |
| Exhibited at World's Fair..... 192 | ii | |
| Sudbury ores..... 281 | xii | |
| 160 c | xiv | |
| analysis..... 282 | xii | |
| Bluevale, TURNBERRY TP., HURON CO. | | |
| Brick-yard at..... 57 B | xv | |
| Bluewater (NEW POST) river, ABITIBI RIVER. | | |
| Fall on, description..... 145 A | xiii | |
| Photo..... 144, 145 A | xiii | |
| Quartzites on..... 140 A | xiii | |
| Swamp elm on..... 176 A | xiii | |
| Bluff lake, MANITOU LAKE DIST., R. R. D. | | |
| 49 | iv | |

| | Page. | Vol. | | Page. | Vol. |
|---|----------|------|--|-----------------|------|
| Blum, Anthony | | | Bohemia mt., SUFFOLK CO., N. Y. | | |
| Gold mining by, Manitou lake.. | 123 | vii | Copper in gabbro of..... | 87 | iii |
| Owner, Laurentian g. m..... | 51, 52 A | xv | Boileau Reduction Co. | | |
| President, Laurentian Mg. Co.... | 52 A | xiv | Exhibits of, at Buffalo..... | 25 A | xv |
| Volcanic Reef Mg. Co..... | 52 A | xiv | Boiler Inspection and Insurance Co. | | |
| Secretary, Twentieth Century Mg. | | | Mica covering tested by..... | 32 | v |
| Co..... | 249 | xi | plate. | | |
| Frank | 256, 257 | ii | Canadian imports of, 1881-87.... | 246, 249 | R C |
| Blyth, MORRIS TP., HURON CO. | | | Boilers. | | |
| Brick works at, notes on..... | 70 B | xv | Canadian imports of, 1881-87.... | 250 | R C |
| Onondaga formation at..... | 45 | R C | Mica for covering, notes by Blue | | |
| Salt at..... | 187, 188 | R C | 31, 32 | v | |
| depth of..... | 185 | R C | scrap..... | 34 | vi |
| Blytheswood, MERSEA TP., ESSEX CO. | | | Nickel for..... | 144 | ii |
| Natural gas at..... | 117 A | xiv | Bois Brule, R. R. D. See Brule. | | |
| Blythfield tp., RENFREW CO. | | | Boland, J. P. | | |
| Ochre in..... | 205 | ix | Managing Director, Empress gold | | |
| Steatite and tale in..... | 210 | ix | mine..... | 265 | vi |
| Tourmaline and tremolite in... | 211 | ix | Pioneer of Wanapitei dist. | 138, 139 | vii |
| Boal mica mine, STORRINGTON TP., | | | lake, WANAPITEI LAKE DIST., | | |
| FRONTENAC CO. | 135 | x | Nip. | | |
| Boars-back. See Esker. | | | Gold mining near..... | 267-269 | vi |
| Bobcaygewan rapid, STURGEON | | | 86, 87 | vii | |
| LAKE, VICTORIA CO. | | | <i>See also</i> Crystal mine. | | |
| Trenton formation at..... | 113 B | xiii | Bole, B. P. | 115 | ix |
| Bobs lake, FRONTENAC AND LANARK | | | 140 | x | |
| COS. | | | 73 | xi | |
| Apatite mining on..... | 239 | i | lake, MICHIGOTEN DIV., ALG. | | |
| evidence before R.C.170, | | | Iron prospecting near..... | 319 A | xiv |
| 174-177 | R C | | Minor ref. to..... | 291 A | xiv |
| Corundum-bearing rocks near.... | 227 | viii | Rocks near..... | 313, 317, 318 A | xiv |
| Field geology on..... | 220 | v | Bolger, Francis | 106 | ii |
| Gneisses near, rust-coloured.... | 50 | ii | Bolitho, Thomas | 34 | i |
| Iron ore on..... | 137 | R C | Bolton, F. | 60 A | xiii |
| Limestone belt crossing..... | 46 | ii | 51 A | xiv | |
| Mica mining on..... | 12, 92 A | xiii | L. L. | | |
| 86 A | xiv | | Manager, Radnor iron mine..... | 80 A | xvi |
| 103 A | xv | | Report by, on explorations be- | | |
| 89 A | xvi | | tween Otto tp. and Abitibi | | |
| 437 | R C | | river..... | 173-190 | xii |
| Bocage (Indian) | 58 | R C | ref. to..... | 268 A | xiv |
| Bochum, RHENISH-WESTPHALIA, GER- | | | Work by, 1902..... | 5, 72 | xii |
| MANY. | | | William | | |
| Mining school at..... | 495 | R C | Limestone quarrying by, Win- | | |
| Bodilly, J. W. | 71 | xv | chester tp..... | 40 B | xiii |
| Boerth, Henry J. See Boerth Min- | | | Pottery making by, Albion tp... | 118 B | xv |
| ing Co. | | | Bolton, ALBION TP., PEEL CO. | | |
| gold mine, CLARENDON TP., | | | Brick-yard in, notes on..... | 89 B | xv |
| FRONTENAC CO. | | | Bolton, WORCESTER CO., MASS. | | |
| Notes on, 1899..... | 93, 94 | ix | Petalite at..... | 472 | R C |
| 1901..... | 236 | xi | Bolts. | | |
| by Miller..... | 203 | xi | Canadian imports of, 1881-87. 246, 249 | R C | |
| Re-opened, 1903..... | 93 A | xiii | Bonanza Creek Gold Mg. Co. | | |
| Mining Co. | | | Capital and date of charter..... | 24 A | xiv |
| Afterwards Clarendon Mg. Co... 236 | xi | | Exhibits of, at Pan-American | | |
| Capital and date of charter..... | 9 | viii | Exhibition..... | 25 A | xv |
| Bog iron ore. See Limonite. | | | gold mine, McLELLAN TP., | | |
| Bog manganese (WAD). | | | NIP. | | |
| Hardness of..... | 201 | vi | Notes on, 1894..... | 233 | iv |
| Madoc tp. and Thunder bay.... | 211 | ix | Gold Mg. Co. | 214 | v |
| Specific gravity of..... | 201 | vi | lake, SOUTHEAST ALG. | | |
| Bogardus, W. B. | 152 A | xiv | Country near, notes by Gratton.. | 160 | xii |
| Bohemia. | | | Nickel Mg. Co. | | |
| Cambrian in..... | 31 | R C | Capital and date of charter..... | 7 | vii |
| Cobalt ores of..... | 61-63 B | xiv | Mammoth gold mine worked by | | |
| Colour works in..... | 87, 88 B | xiv | 4, 190, 229 | v | |
| Melaphyre from..... | 171 | viii | Work by, Maclellan tp..... | 234 | iv |
| Pitchblende in, export prohibi- | | | 4 | v | |
| ted..... | 12 B | xiv | | | |

| | Page | Vol. |
|---|----------|--------|
| Bonanz Nickel Mg. Co.—<i>Con.</i> | | |
| Work by, Wanapitei lake..... | 138 | vii |
| Reef Extension, Ltd. | | |
| Capital and date of charter..... | 28 | A xvi |
| <i>Bonasa umbellu. See</i> Grouse, ruffed | | |
| Bone ash. | | |
| Lime used in making..... | 3 | B xiii |
| Bonewell, G. F. | 102 | vii |
| Bonheur, SEINE RIVER REG., R.R.D. | | |
| Road from, to Harold lake..... | 69 | v |
| notes on making of.. | 64 | vii |
| | 34 | vii |
| Belle Gold Mg. Co. | | |
| Capital and date of charter..... | 9 | viii |
| Bonna concrete system. | | |
| Descriptions and illustrations of. | 177 | A xiv |
| Bonnechere river, RENFREW CO. | | |
| Chazy formation on..... | 41 | R C |
| Explorations on, by Murray, ref. | | |
| to..... | 244 | viii |
| Marl near..... | 121 | A xiv |
| Trenton formation in valley of.. | 104 | B xiii |
| Waterpower of..... | 252 | vii |
| Bonner, Charles | | |
| Nickel found by, Michipicoten | | |
| island..... | 443 | R C |
| John | 171, 172 | ii |
| Bonner location, MICHIPICOTEN IS- | | |
| LAND | 60, 61 | R C |
| Bonney, Prof. G. T. | | |
| Refs. to studies by, of Sudbury | | |
| rocks..... | 206 | x |
| Views of, <i>re</i> origin of Kimberly | | |
| diamonds..... | 122 | ix |
| Wanapitei rocks.. | 127, 131 | iv |
| Bonter, Edward | 137 | iii |
| William | 137 | iii |
| Booms. See Mining booms. | | |
| Boone, J. | | |
| Brick-yard of, Thornbury..... | 66 | B xv |
| Boonton, MORRIS CO., N.J. | | |
| Magnetic ore in, treatment of. | 102, 103 | ii |
| Booth, William A. | 156 | vi |
| and Garrett. | | |
| Analyses by, of iron ore from | | |
| Snowdon tp..... | | |
| Borax. | 131 | R C |
| United States, production, 1888.. | 525 | R C |
| Bordeaux Tramway Co. | | |
| Moss-litter used by..... | 212 | ii |
| Borden, Hon. F. W. | 4 | vii |
| Dr. F. W. | 60 | ix |
| feldspar mine, PORTLAND TP., | | |
| FRONTENAC CO. | | |
| Notes on, 1902..... | 137 | xii |
| 1905..... | 102 | A xv |
| 1906..... | 88 | A xvi |
| Bore hole records. | | |
| Value of..... | 163 | i |
| Anthraxolite | | |
| Balfour tp..... | 160, 161 | vi |
| Gas and Oil | | |
| Brantford (near)..... | 25, 26 | A xiii |
| Elgin co., Dunwich tp..... | 15 | viii |
| Port Stanley..... | 41 | B xiii |
| Essex co..... | 18 | vi |
| Guelph..... | 150 | xii |
| | 123 | B xiii |
| Hepworth..... | 45 | xi |

Bore hole records.—*Con.*

Gas and Oil

| | | |
|--------------------------|---------|--------|
| Interlake peninsula..... | 109-114 | A xv |
| Kent co., Chatham..... | 68 | B xiii |
| E. Tilbury tp..... | 103 | A xvi |
| Raleigh tp..... | 41 | xii |
| Zone tp..... | 19 | vi |
| Kokohama, Ind..... | 152 | R C |
| Manito lin island..... | 72, 73 | A xv |
| Middlesex co..... | 80 | B xiii |
| Petrolea dist..... | 153 | R C |
| Portland tp..... | 283 | v |
| Stratford..... | 150 | xii |
| Western Ontario..... | 97, 117 | A xiv |

Iron

| | | |
|-------------------------|-----|----|
| Bedford tp..... | 228 | v |
| Matawin iron range..... | 131 | v |
| | 131 | x |
| Sabawe lake..... | 131 | xi |

Nickel

| | | |
|-----------------|-----|--------|
| Blezard tp..... | 214 | A xiii |
|-----------------|-----|--------|

Salt

| | | |
|--------------|----|----|
| Windsor..... | 33 | vi |
|--------------|----|----|

Silver

| | | |
|------------------|-----|----|
| Mamainse pt..... | 243 | ii |
|------------------|-----|----|

Water

| | | |
|--------------------------------|-----|--------|
| Essex co., Anderton quarries.. | 42 | B xiii |
| Essex..... | 46 | B xiii |
| London (Ont.) asylum..... | 152 | R C |
| Midland..... | 58 | i |

Boring.

See also Bore hole records.

| | | |
|---------------------------------|----------|-----|
| Advantages of Govt. aid in..... | 425 | R C |
| Australia, Govt. aid to..... | 55 | x |
| notes..... | 233, 234 | v |

By Govt. diamond drill. *See*
Govt. diamond drill.

| | | |
|------------------------------|----------|-----|
| Experience of operators..... | 127 | i |
| Notes on, by D. Sinclair.... | 166, 167 | R C |

Coal

| | | |
|------------------------------------|--------|--------|
| Balfour tp (anthraxolite)..... | 95, 96 | C xiv |
| Soweska river, notes by J.M. Bell. | 166 | A xiii |

Copper

| | | |
|----------------------------------|-----|-----|
| Mamainse pt..... | 130 | ii |
| Sand Bay location, L. Superior.. | 73 | iii |

Gas and Oil

| | | |
|---------------------------------|---------|-------|
| Athabaska Landing..... | 172 | v |
| Cost of..... | 102 | A xvi |
| Kent co., report by Knight.. | 92, 104 | A xvi |
| Ontario peninsula..... | 5 | v |
| Paper on, by Blue..... | 117-140 | i |
| Pelee island, L. Erie..... | 5 | v |
| Processes, old and new compared | 156 | R C |

Gold

| | | |
|-------------------------------|---|---|
| Mammoth gold mine, Macleannan | | |
| tp..... | 4 | v |

Iron

| | | |
|----------------------------------|------------|--------|
| Bedford tp..... | 5, 174 | iv |
| | 4 | v |
| Blezard tp..... | 214 | A xiii |
| Burwash lake..... | 17 | A xvi |
| Government subsidies advocated. | | |
| for..... | 238 | i |
| Loon lake, Alg..... | 12, 29, 44 | A xiv |
| | 27 | A xv |
| Michigan and Minnesota, cost of. | 175 | iv |
| | 231, 232 | v |
| Nipigon Lake dist..... | 120, 127 | A xvi |
| Steep-rock Lake dist..... | 266 | xi |

| | Page. | Vol. |
|--|-----------------|------|
| Boring, Iron. — <i>Con.</i> | | |
| Timagami lake | 78 A | xiv |
| Mica | | |
| South Burgess tp | 88 A | xvi |
| Nickel | | |
| Sudbury dist | 142 C | xiv |
| Bleazard tp | 214 A | xiii |
| Drury and Trill tps | 195 A | xiii |
| Salt | | |
| Detroit river | 123 | xi |
| Silver | | |
| Coleman tp | 31 A | xvi |
| Kerr lake | 83 A | xv |
| Water | | |
| <i>See</i> Artesian wells, and Water. | | |
| Bork, W. H. | 102 | vii |
| Borland, William F. | 83 | viii |
| Bornite (ERUBESCITE). | | |
| Bannockburn (near) | 42 A | xv |
| Copper mt., B.C. | 162 C | xiv |
| Christie tp | 101 | ix |
| Creighton tp | 180 A | xvi |
| Determination of | 203, | 212 |
| Grant co., Oregon | 71 B | xiv |
| Hardness of | 202 | vi |
| Lake Huron | 193 | ii |
| McGown copper m. <i>See</i> McGown copper m. | | |
| Occurrences of | 195 | ix |
| Parry Sound (near) | 37 | iv |
| Shewn at World's Fair | 192 | ii |
| Specific gravity of | 202 | vi |
| Vermilion mine, Sudbury dist .. | 161 C | xiv |
| Borron, Edward B. | | |
| Appointment of, as Inspector ... | 315 | R C |
| Copper mining by, Mississagi river | 148 | viii |
| Evidence by, before R.C. <i>re</i> :— | | |
| copper, L. Huron and L. Superior .. | 92-100, 402-404 | R C |
| smelting | 403 | R C |
| <i>ref. to.</i> | 378 | R C |
| free-trade | 237, 238 | R C |
| gold | 114, 115 | R C |
| Hudson Bay slope | 69, 70 | R C |
| lead | 147 | R C |
| miner's rights | 316 | R C |
| rail freight | 216 | R C |
| silver, L. Superior | 194, 195 | R C |
| technical instruction | 428, 429 | R C |
| Limonite mentioned by, Oba river .. | 156 A | xiii |
| Minor refs. | 51 | R C |
| | 81 | i |
| Notes by, on:— | | |
| agricultural prospects, Moose River basin | 115 | iv |
| climate of Moose River basin .. | 106 | iv |
| coal, Mississagi river | 125 | iv |
| spruce in The Hinterland | 120 | iv |
| Reference to surveys by:— | | |
| Abitibi lake | 82 B | xiii |
| Moose River basin | 77, 78 | ii |
| | 105, 126-128 | iv |
| | 160 A | xiii |
| | 149, 150, 181 A | xvi |
| Reports by, on:— | | |
| A section of the height-of-land region, N.E. of L. Superior. | 240-258 | v |

| | Page. | Vol. |
|---|------------|------|
| Borron, Edward B. — <i>Con.</i> | | |
| Prospecting operations of the Montreal Mg. Co. | 64-66 | iii |
| Views of, <i>re</i> :— | | |
| Peat area, Hudson Bay slope .. | 191 | i |
| | 209 | ii |
| Price of peat-charcoal | 207 | i |
| Work by, 1895 | 5 | v |
| for Montreal Mg. Co. | 73 | iii |
| <i>See also</i> Evidence before R.C. | | |
| Borsowka river, Russia. | | |
| Cornudum on | 235 | viii |
| Bosanquet tp., LAMBTON CO. | | |
| <i>See also</i> Kettle pt. | | |
| Brick clay and yard in. <i>See</i> Thedford. | | |
| Fossils from | 422 | R C |
| Salt in. <i>See</i> Port Franks. | | |
| Section of strata in | 68 B | xiii |
| Boston, Boston tp., Nip. | | |
| Trail from, to Larder lake | 203 A | xvi |
| Boston, U. S. | | |
| Brick pavements in | 108 | iii |
| Fire of, behaviour of granite buildings in | 134, 136 | iii |
| and Worcester Ry. | | |
| Peat burning experiments on ... | 198 | i |
| Mines, Ltd. | | |
| Capital and date of charter | 28 A | xvi |
| tp., Nip. | | |
| Iron in | 30 B | xiv |
| report by Miller | 261-267 A | xiv |
| Bostwick, —? | 209 | v |
| Boss. | | |
| Meaning of term | 231 | vi |
| C. M. | | |
| Acknowledgments to | 177 | x |
| Manager, Elsie mine | 251, | xii |
| Great Lakes Copper Co. | 98 | ix |
| Krean Hill mine | 64 A | xv |
| Bossineau, J. | 102 | vii |
| Bothwell, ZONE TP., KENT CO. | | |
| Oil in | 55, 160, | R C |
| | 90 A | xiv |
| <i>See also</i> Bothwell oil field. | | |
| boring for, logs | 109, | xiv |
| production, 1905 | 108 A | xv |
| Salt at | 55, 186 | R C |
| oil field, KENT CO. | | |
| Boring in | 5, 25 | v |
| Notes on, by Blue | 18-24 | vi |
| Production, 1897 (disappointing) .. | 18 | vii |
| 1898 | 15 | viii |
| 1900 | 17 | x |
| 1905 | 21, 92 A | xvi |
| Botrychium virginianum. | | |
| Abitibi Lake dist | 242 A | xiv |
| Mattagami valley | 151 A | xv |
| Botsford, A. F. | | |
| Gold prospecting by, R. R. d. ... | 178 | vii |
| Manager, Maw gold mine | 102 | x |
| Botta, P. E. | 166 | i |
| Botterell, A. E. | 250 | xi |
| Bottle kiln. | | |
| Diagram of | 126 A | xiv |
| Bottle lake, MICHIGICOTES DIV., ALG. | | |
| Minor ref. to | 179 A | xv |
| Rocks on | 202, 205 A | xv |

| | Page. | Vol. |
|---|------------|------|
| Bouchard, Theophile | 167-175 | iii |
| Boucher, L. | 144 | x |
| mine, WANAPITSET DIST., NIP. | | |
| Pyrrhotite from, analysis | 145 c | xiv |
| Bouin farm, MOUTH OF MONTREAL | | |
| RIVER, NIP. | | |
| Terrace on | 177 | ix |
| Boulder(s). | | |
| Cobalt, conglomerate, notes by | | |
| Miller | 212 A | xvi |
| Cobourg, near, nepheline-syenite | 244 | viii |
| Hastings corundum dist. | 224 | vii |
| Night-hawk lake, photo. | 128, 129 A | xiii |
| Origin of | 16 | R C |
| Paris, Ont., burnt for lime | 149 | xii |
| Rainy River dist. | | |
| Abram lake | 96 | v |
| burnt for lime | 76 | iv |
| Elbow lake | 91 | v |
| Elbow lake | 90 | v |
| -clay. See Clay, boulder | | |
| island, L. OF THE WOODS, | | |
| R R.D. | | |
| Gold on, disc-very | 118 | R C |
| mining | 232 | ii |
| lake, SHILBANDOWAN LAKE | | |
| REG., TH.B.D. | | |
| Iron ore south of | 128 | v |
| Minor ref. to | 127 | v |
| Notes on | 89, 90 | vi |
| Mg. Co. | | |
| Capital and date of charter | 9 | ix |
| Mine of, idle, 1899 | 51 | ix |
| 1900 | 73 | x |
| Work by, 1898 | 61, 276 | viii |
| Boundary pt., AMTIBI LAKE, NIP. | 219 A | xvi |
| Bounties. | | |
| Arsenic, suggested | 29 | xi |
| Iron | | |
| <i>See also</i> Iron Mining Fund. | | |
| 1883-1889 | 328 | R C |
| 1883-1893 | 28 | ii |
| 1900 | 31-33 | x |
| conditions | 71 | ii |
| Connec's views | 31 | iv |
| Connec's views | 112 | ii |
| Oil | 21 A | xv |
| amount paid, 1904 | 21 A | xiv |
| rate | 22 A | xv |
| Bournonite (WHEEL-ORE). | | |
| Bagot and Darling tps. | 193 | ii |
| 195 | 195 | ix |
| Determination of | 208 | vi |
| Hardness and specific gravity of. | 202 | vi |
| Bousquet, J. | 115 | ix |
| 140 | 140 | x |
| Boussingault, J. B. | 383, 497 | R C |
| Boustead, W. E. | | |
| Assays by, of rocks from Opasa- | | |
| tika reg | 256 | v |
| Report by, on Summer Mining | | |
| classes, 1903 | 217-221 | iv |
| Bovaird, Seyfang & Co. | 118 | ii |
| Bovill, Edward N. | 9 | vi |
| Bovisla, ITALY. | | |
| Arsenic mining in | 101 | xi |
| Bovoy, Henry T. | 217 | i |

| | Page. | Vol. |
|--|----------------|------|
| Bow, J. A. | | |
| Acknowledgments to | 137 | xi |
| Report by, as Inspector of Mines. | | |
| 1897 | 34-84 | vii |
| 1898 | 49-90, 262-274 | viii |
| 1899 | 35-88 | ix |
| 1900 | 69-90 | x |
| Report by, on accidents at :— | | |
| Olive gold mine | 32-34 | vii |
| West End silver mine | 24, 25 | viii |
| 25-31 | 25-31 | ix |
| Resignation of | 5 | x |
| Work by, 1898 | 275, 280 | viii |
| Park farm, NEAR BRANTFORD, | | |
| BRANT CO. | | |
| Gas in, and oil | 25, 26 A | xiii |
| 21 A | 21 A | xiv |
| acquired by Imperial Nat- | | |
| ural Gas Co. | 108 A | xiv |
| boring for, log of well | 107 A | xiv |
| Bowden, J. L. | 115 | ix |
| 140 | 140 | x |
| Bowell tp., SUDBURY DIST., ALG. | | |
| Geology of | 200 A | xiii |
| Rocks in | 274 | xii |
| conglomerate | 39, 94 C | xiv |
| petrography | 129, 130 C | xiv |
| nickel-eruptive | 211, 276 | xii |
| 199 A | 199 A | xiii |
| 68-70 C | 68-70 C | xiv |
| off-set deposits | 63, 114 C | xiv |
| tuff, analysis | 132 C | xiv |
| Bowen, N. L. | 215 A | xvi |
| Bowman mills, WHITBY. | | |
| Salt spring at, analysis | 201 | ix |
| Bowie, N. | 115 | ix |
| Robert | 268 | vi |
| Bowker, Sidney T. | | |
| Recorder, Sault Ste. Marie Mg. | | |
| div | 36 A | xvi |
| Report by | 41 A | xvi |
| Bowlby and Benson. | 100 A | xvi |
| Bowling Green, Wood co., OHIO. | | |
| Cincinnati arch near | 116 | i |
| Bowman, J. | 109 | x |
| tp., NIP. | | |
| Apatite deposits in | 436, 437, 440 | R C |
| Minor ref. to | 109 A | xiii |
| Bowmanville, DARLINGTON TP., DUR- | | |
| HAM CO. | | |
| Brick-yard at, notes on | 61 B | xv |
| Coal at, reported | 203 | ii |
| Iroquois beach near | 230 A | xiii |
| Limestone quarry at | 41 B | xiii |
| Boyce, David. | 130 | xii |
| 103 A | 103 A | xv |
| Boyd, David G. | | |
| Map by, Michipicoten div. with vol. | vii | |
| ref. to | 186 | vii |
| Report by, Michipicoten div. | | |
| 1897 | 100-107 | vii |
| 1898 | 100-102 | viii |
| ref. to | 254 | viii |
| 1899 | 112-118 | ix |
| 1900 | 137-144 | x |
| 1901 | 70-75 | xi |
| 1902 | 62-67 | xii |
| 1903 | 46-49 A | xiii |
| 1904 | 35 A | xiv |

| | Page. | Vol. | | Page. | Vol. |
|---|------------|------|---|----------|------|
| Boyd, David G.—<i>Con.</i> | | | Brachiopoda. | | |
| Work by, 1900 | 6 | x | Anderson tp. | 125 | xi |
| 1902 | 259 | xii | Kawanaska river (near) | 186 | xii |
| 1903 | xi | xiii | Kwataboahagan river | 185 | xiii |
| Boyd, J. C. | 102 | vii | Mattagami valley, in erratics | 135 | xv |
| | 102 | viii | Theford | 154, 155 | xii |
| J. F. | 102 | viii | Bracken, John | | |
| | 115 | ix | Abitibi soils determined by | 130 | xiii |
| J. W. | 108 | x | Bradburn tp., SUDBURY DIST. | | |
| James | | | Soil and timber in | 143, 145 | xv |
| Notes by, on asbestos | 96 | iii | Braddock Development Co. | | |
| W. S. | 102 | vii | Capital and date of charter | 31 | xvi |
| | 102 | viii | Braddock Wire Works. | | |
| Caldwell & Co. | 103 | ix | Labour employed by, statistics | 370 | RC |
| | 86 | xi | Bradely, H. M. | 71 | ix |
| Smith mine. <i>See</i> Smith, Cap- tain Boyd | | | Braden, William | 118 | x |
| Boyer, B. | | | | 269 | xi |
| Helen iron mine discovered by | 45 | xv | Bradford, F. E. | 73 | xi |
| Licence to | 102 | vii | W. | 53 | xiii |
| | 102 | viii | Bradley, E. C. | 97 | xvi |
| | 115 | ix | P. R. | | |
| | 140 | x | Manager, Ontario Smelting Works | 84 | xiii |
| | 73 | xi | | 69 | xiv |
| | 65 | xii | resigned | 63 | xv |
| J. | 102 | viii | & Co. | 119 | ii |
| lake, MICHIGAN DIV., ALG. | | | estate, PETROLEA. | | |
| Altitude and depth of | 155, 157 | ix | Boring on, for oil | 111 | xv |
| Description of | 169 | xi | Bradt, E. F. | | |
| Draining of | 95 | xi | Manager for Clergue Co. | 103 | xii |
| | 63 | xii | Helen iron mine | 265 | xi |
| | 187 | xv | McKellar iron mine | 112 | x |
| Glacial deposits near | 169 | xi | Bradwin, E. W. | 50 | xvi |
| striae | 178 | ix | Brady, H. F. | 84 | vi |
| | 185 | xi | Brady's Bend, ARMSTRONG CO., PA. | 148 | i |
| Gold mining on | 113 | ix | Braeside, McNAB TP., RENFREW CO. | | |
| Iron ore on, analysis | 192, 193 | x | Limestone at, analysis, quarries | 104, 105 | xiii |
| estimate of quantity | 258 | viii | | 30 | viii |
| Iron ore on, notes on mining | 255 | viii | Bragg, John | 60 | ix |
| <i>See also</i> Helen iron mine. | | | Brain, H. I. | | |
| Iron pyrites on | 169 | xvi | Braithwaite. | | |
| Notes by Coleman | 221 | xiii | Notes by, on origin of peat | 182, 183 | i |
| Origin of | 194 | x | Brampton, CHINGACOSY TP., PEEL | | |
| | 171 | xi | co. | | |
| Photo of | 176, 177 | xi | Brick-yard at | 15 | xiii |
| | 188 | xv | notes on | 89 | xv |
| Pyrrhotite near | 168 | xi | Medina shale at | 7 | xv |
| Rise to, from Sayers lake | 153 | xi | analysis | 8 | xv |
| Rocks on and near | 156 | ix | Pressed Brick Co. | | |
| | 191 | x | Exhibits at Buffalo | 26 | xv |
| | 168 | xi | Works of, at Brampton | 89 | xv |
| Yellow ochre on | 189 | xv | John | | |
| analysis | 169 | xi | Evidence by, <i>re</i> royalties in the Colonies | 43, 44 | i |
| Boyle, David | | | Bramwell, Sir Fredk. | 120 | viii |
| Evidence by, before R C. | 423 | RC | Brandenstein, ? | 81 | xiv |
| In charge of Ontario exhibits, Chicago | 78 | ii | Brandon, Wm. H. | 228 | i |
| | 185, 191 | iii | Brandy island, L. ERIE. | | |
| Bracebridge, MACAULAY TP., MUS- KOKA DIST. | | | Salt in, boring for | 123 | xi |
| Brick works at, notes on | 82 | xv | Brant co. | | |
| water-wheel for, photo | 83 | xv | Brick-making in, notes by Baker | 58, 59 | xv |
| Clay at, analysis | 27 | xv | Gas and oil in, notes and logs | 106-108 | xiv |
| Saugeen | 19, 33, 82 | xv | Limestone in, Corniferous | 25 | xiii |
| working of, photo | 41 | xv | notes by Miller | 33 | xiii |
| Waterpower for, from Muskoka river | 14 | xv | lake, MICHIGAN DIV., ALG. | | |
| Brick Co. | | | Iron ore on | 104 | xii |
| Brick-yard of, notes on | 83 | xv | hematite | 20 | xii |
| | | | Minor reference to | 293 | xiv |
| | | | Rocks on | 305 | xiv |

| | Page. | Vol. | | Page. | Vol. | |
|--|---------------|------------|---|--------------|--------|------|
| Brant tp., BRUCE CO. | | | Breidenbach, Theodore | | | |
| Brick-clay in. <i>See</i> Walkerton. | | | Manager, Flint lake g.m. | 255 | xi | |
| Cement works in, photo. | 113 | A xiv | | 59 | xii | |
| <i>See also</i> Brantford. | | | Mikado g.m. | 48, 105, 107 | vi | |
| Gypsum in. | 35, | 36 B xiii | | 51-53, 120 | vii | |
| Iron ochre in. | 200 | ix | | 44, 64 | viii | |
| Limestone in. | 35 | B xiii | (resigned) | 52 | ix | |
| Lithographic stone in. | 6, | 36 B xiii | Sirdar g. m. | 56 | ix | |
| Marl in. | 37 | B xiii | (resigned) | 78 | x | |
| Mineral water in, analysis. | 204 | ix | Work by, at Tycoon g. m. | 58 | ix | |
| Brantford, BRANTFORD TP., BRANT CO. | | | Breitung, Edward N. | | | |
| Brick-making in, notes by Baker | 58, | 59 B xv | <i>See also</i> Breitung Iron Co. | | | |
| Cement plant near. | 17 | A xiii | Manager for same | 263 | xi | |
| | 18 | A xiv | | 71 | A xv | |
| (<i>See also</i> Ontario Portland Cement Co.) | | | Iron Co. | | | |
| Erie clay at. | 13 | B xv | Capital and date of charter | 26 | A xv | |
| Gas at. | 22 | A xiii | Work by, 1901. | 263 | xi | |
| | 21 | A xiv | | 1902 | 20 | xii |
| | 23, | 108 A xv | | 1905 | 71 | A xv |
| | 25 | A xvi | <i>See also</i> Loon Lake iron mine. | | | |
| Gravel at. | 51 | R C | Breitung lake, DEROCHE TP., ALG. | | | |
| | 142 | xii | Iron ore in. | 139 | xi | |
| Limestone at. | 33 | B xiii | Bremen, GERMANY. | | | |
| Oil at and near. | 25 | A xiii | Peat used in, for sanitation. | 216 | ii | |
| | 90 | A xiv | Bremner, James | | | |
| log of wells. | 106, | 107 A xiv | Limestone quarry of, Beachville. | 149 | xii | |
| | 112, | 114 A xv | | 92 | B xiii | |
| Brantford tp., BRANT CO. | | | Bremner, NEAR MONTIZAMBERT, | | | |
| Gypsum mining in. | 281 | v | TH. B. D. | | | |
| <i>See also</i> Torrence mine. | | | Devonian pebbles near, source of. | 157 | viii | |
| Brick Co. | | | Bremner river, WHITE RIVER, L. | | | |
| Brick-yard of, photo. | 102 | B xv | SUPERIOR. | | | |
| Power and Light Co. | 33 | B xiii | Headwaters of, altitude. | 138 | viii | |
| <i>Brasen a pellata.</i> | | | Notes on, by Coleman | 136, | 137 | |
| Ottawa (near). | 225 | x | | | viii | |
| Brass. | | | Brennan, Thomas J. | 134 | x | |
| Biblical ref. to. | 381 | R C | Brennan iron mine, MADOC TP., | | | |
| Brassard tp., BERTHIER CO., QUE. | | | HASTINGS CO. | | | |
| Beryl in. | 237 | vii | Notes on, 1901. | 262, 263 | xi | |
| Braunschweig, GERMANY. | | | Brent, Charles | | | |
| Moss-litter used at. | 191 | vi | Assayer for Black Jack Mfg. Co.. | 26 | iii | |
| Braunt, W. T. | 193 | A xvi | Empress gold mine examined by | 81 | xii | |
| Brazil. | | | Engineer, Triumph g. m. | 57 | vii | |
| Diamonds of. | 122 | ix | Manager, Bullion No. 2 g. m. | 57 | ix | |
| for drilling. | 222 | v | | 95 | xii | |
| Nickel coinage in. | 161 | ii | Nino g. m. | | | |
| | 164 | C xiv | Reduction works, Ken- | | | |
| Palladium in porpezite in. | 7 | A xiv | ora | 234, 235 | ii | |
| Bread. | | | Notes by, on Bully Boy mine .. | 45 | A xiv | |
| How to cook, hints by Blue. | 114 | v | Kenora custom mill | 33 | iii | |
| Breakhurst Oil Co. | | | Sampling works of, at Kenora. . | 62 | vii | |
| Exhibits of, at Buffalo. | 25 | A xv | Brereton—? | 28 | iii | |
| Breakneck (OR GRAND) falls, OPAS- | | | Breslau, WATERLOO TP., WATER- | | | |
| ATIKA RIVER, ALG. | | | LOO CO. | | | |
| Beauty of; photo of. | 176, | 178 A xiii | Brick-yard at, notes and photo. . | 103 | B xv | |
| Iron-bearing rocks near. | 150 | A xiii | Guelph formation near | 114 | B xiii | |
| Power of | 136, | 145 A xiii | Pyrrhotite from, analysis | 163 | ii | |
| Brearton,—? | 236, 237, 240 | v | Brewster, PUTNAM CO., N. Y. | | | |
| Breccia. | | | Pyrrhotite from, analysis. | 163 | ii | |
| Burke tp., photos | 44, | 45 B xiv | Brice, Walter. | 54, 57 | xi | |
| Coleman tp., analysis. | 48 | B xiv | Brick(s). | | | |
| Creighton tp., photo | 12 | C xiv | Flashing in burning of, notes by | | | |
| Definition of. | 529 | R C | Baker | 54-56 | B xv | |
| Lorrain tp., photo. | 47 | B xiv | For street pavements, paper by | | | |
| Sayer lake, photo | 176, | 177 | Gibson | 103-132 | iii | |
| | | | <i>See also</i> Brick, vitrified. | | | |
| | | | Canada, production, 1887 | 213 | R C | |
| | | | From sand and lime, notes by | | | |
| | | | Miller | vi | B xiii | |
| | | | Industry of, 1890, paper on. | 101-105 | i | |
| | | | | 1906. | 19 | A xv |

| | Page. | Vol. | | Page. | Vol. |
|--|------------|--------|---|----------|--------|
| Brick (s)—<i>Con.</i> | | | Brigden, MOORE TP., LAMBTON CO. | | |
| Prices of, according to locality..... | 15 | A xiii | Brick-yard at, notes..... | 75 | B xv |
| Peat dust for | 215 | A xvi | Briggs, Charles F. | 132 | xii |
| Statistics, 1886-1887 | 243 | R C | Brigstocke, R. W. | 83 | A xv |
| 1891 | 6 | i | Brighton, BRIGHTON TP., NORTHUMBERLAND CO. | | |
| 1892 | 7, 11 | ii | Beach (near)..... | 239 | A xiii |
| 1893 | 7, 10 | iii | altitude..... | 222 | x |
| 1894 | 11, 18 | iv | Sand-dune at, photo..... | 224, 225 | x |
| 1895 | 11, 12 | v | Brighton iron mine, TOWER, MINN. | 124 | R C |
| 1896 | 12, 13 | vi | Brighton tp., NORTHUMBERLAND CO. | | |
| 1897 | 15, 17 | vii | Gravel deposit in. <i>See</i> Codrington. | | |
| 1898 | 11, 12 | viii | Brimson, Joseph | 241 | ii |
| 1899 | 13 | ix | Brimstone. <i>See</i> Sulphur. | | |
| 1900 | 11-14 | x | Brinsmade, Robert B. | | |
| 1901 | 12, 13, 30 | xi | Notes by, re pyrites in New York | | |
| 1902 | 12, 13, 27 | xii | state..... | 190, 191 | A xvi |
| 1903 | 2, 13 | A xiii | Briquettes, clay | | |
| 1904 | 1, 3, 16 | A xiv | <i>See</i> Clay briquettes. | | |
| 1905 | 1, 4, 17 | A xv | Brisseau island, TIMISKAMING LAKE, | | |
| 1906 | 3, 4, 6 | A xvi | Nip. | | |
| United States, production, 1887.. | 229 | R C | Rocks on..... | 87 | B xiii |
| Brick clay. | | | Bristol, GLOUCESTER CO., ENGLAND. | | |
| <i>See also</i> Bricks, Brick Kilns, | | | Apatite shipments to, 1884-85 ... | 443 | R C |
| Brick yards and Clay. | | | Bristol, PONTIAC CO., QUE. | | |
| Abitibi region..... | 207 | A xiv | Iron mine at | 354 | R C |
| Brockville, marine shells in | 241 | A xiii | 25, 26 | ii | |
| Credit Forks..... | 167 | i | Britain. <i>See</i> Great Britain. | | |
| Dundas bay (near) | 238 | A xiii | Britannia, NEAR OTTAWA. | | |
| From Leda clay..... | 227 | ii | Cambro-Silurian rocks near..... | 37 | B xiii |
| Holland..... | 217 | x | Trenton..... | 48 | B xiii |
| Interlake pen..... | 229 | R C | Consolidated Gold Mg. Co. | | |
| Lake Superior, analysis and | | | Capital and date of charter..... | 9 | ix |
| method of working..... | 96 | xi | Work by, L. of the Woods..... | 43 | ix |
| Mattagami valley | 139 | A xv | British Admiralty. | | |
| Milton | 73 | R C | Nickel steel tested and used | | |
| Notes by Bell | 78 | R C | by..... | 229, 230 | i |
| Gibson..... | 126-129 | iii | 141 | ii | |
| Owen Sound (near) | 122 | viii | 46, 47 | vi | |
| Report by Baker | Pt. B | xv | 165 | C xiv | |
| kilns | | | <i>See also</i> nickel-steel | | |
| Notes on construction, fuel for, | | | Aluminium Co. | 23 | x |
| flashing, etc..... | 51-56 | B xv | America mine, NEAR QUEENSBORO. | | |
| Peat as fuel for..... | 216 | ii | <i>See</i> next ref. | | |
| Photos of | 51-53, 58 | B xv | American Development Co. | | |
| <i>See also</i> Brick yards. | | | Capital and date of charter..... | 24 | A xiii |
| vitrified | | | Operating pyrites near Queens- | | |
| Early manufacture of..... | 18, 19 | iv | boro | 19, 79 | A xiv |
| For street paving :— | | | 94, 95 | A xv | |
| cost per sq. yd. | 14 | v | 21, 80, 161 | A xvi | |
| notes by Blue | 103-132 | iii | American Oil Co. | | |
| 16-18 | v | | Capital and date of charter..... | 29 | A xvi |
| 14-16 | vi | | Well of, at Leamington..... | 116 | A xiv |
| yards | | | American Pyrites Co. | | |
| London, Ont., photo..... | 81 | B xv | <i>See</i> British-American Develop- | | |
| Ottawa, photo | 47 | B xv | ment Co. | | |
| Report on occurrences and con- | | | American Silver Co. | | |
| ditions of, by M. B. Baker. 56-114 | B | xv | Capital and date of charter..... | 29 | A xvi |
| Brick Mfg. and Supply Co. | | | Association. | | |
| Capital and date of charter..... | 24 | A xiii | Visit of, to Ontario, 1897. . . | 144, 145 | vii |
| Bridgeburg, BERTIE TP., WELLAND CO. | | | 7 | viii | |
| Natural gas supplied to | 44 | xi | Canadian Goldfields, Limited. | | |
| 21, 91 | A xiv | | Capital and date of charter..... | 11 | xi |
| Bridget lake, MICHIGICOTEN DIV., ALG. | | | Colonial Mg. and Dev. Co. | | |
| Iron formation on | 177, 178 | A xv | Capital and date of charter..... | 9 | ix |
| Bridgewater, ELZEVR TP. | | | Work by, Katherine zinc mine.. | 54 | x |
| <i>See</i> Actinolite. | | | 58 | xi | |
| Briers, Daniel de. | 83 | B xiv | Columbia. | | |
| | | | Arsenical ores in | 102 | xi |

| | Page. | Vol. | | Page. | Vol. |
|---|----------------|------|--|------------|------|
| British Columbia.—<i>Con.</i> | | | Brockville.—<i>Con.</i> | | |
| Coal in, competes with that of N.S. | 196 | ii | Pyrites near, mining, early. | 149 A | xvi |
| Gold in, cost of mining alluvial | 258 | vii | notes by Fraleek. | 152, 153 A | xvi |
| Iron exports from, 1885-1887. | 225 | R C | Sea-level at, ancient. | 227 | x |
| Mining laws of, compared to those of Ont. | 4, 5 | vii | Strait at, ancient width of | 243 A | xiii |
| notes by R.C. | 273-275 | R C | Works in, chemical | 152 A | xvi |
| ownership of lands | 43 | i | <i>See also</i> next ref. | | |
| Nickel ores in. | 145 C | xiv | Chemical Co. | | |
| Palladium, platinum and osmium | 8 A | xiv | Apatite mined for, Storrington tp. | 170 | R C |
| Guiana. | | | Works of, notes. | 152 A | xvi |
| Dispute between, and Venezuela Isles. <i>See</i> Great Britain. | 191 | v | Mining Co. | | |
| Lion Gold Mg. and Development Co. | | | Capital and date of charter. | 11 | xi |
| Capital and date of charter. | 9 | viii | Mica mining by, Bastard tp. | 89 A | xvi |
| metalliferous Mines Regulation Act. | 286 | R C | notes and photo | 104 A | xv |
| North American Mg. Co. | 98 | R C | Peat Fuel Co. | 23 | ix |
| South Africa. <i>See</i> South Africa. | | | Broder tp., Nip. | | |
| South Africa Co. | 201 | v | Quartzite in | 72 | i |
| Britnell quarry, NEAR BURNED RIVER STATION, VICTORIA CO. | | | Brodie, D. M. | | |
| Notes and analysis. | 113, 114 B | xiii | Mining land agent, Massey. | 145 | x |
| Britton, C. S. | 91 | ix | Report by, 1900 | 146, 147 | x |
| Broadigan & Co. | | | 1901 | 81, 82 | xi |
| Limestone quarrying by, near Crookston | 99 | vii | Work by, 1900 | 6 | x |
| Brochunier, S. H. | 59 | viii | Robert J. | | |
| 47 | ix | | Evidence by, <i>re</i> fertilizers. | 179 | R C |
| Brock, Sir Isaac | 163 A | xiv | Manager, Smiths Falls phosphate works. | 252 | ii |
| R. W. | | | Brogger, Prof. W. C. | | |
| Acknowledgments to. | 189 | xii | Views of, <i>re</i> origin Norwegian apatites | 443 | R C |
| Analysis by, of nickeliferous rock from Leeds co. | 220 | v | 208 | xi | |
| Petrography by, of rocks from:— | | | Broman, —? | 133 | R C |
| Seeley Bay (near) | 230 | vii | Bromine. | | |
| Sturgeon lake, Th. B. d. | 228 | viii | United States, production, 1888. | 525 | R C |
| Report by, on Larder Lake district | 105 | xii | Bromley tp., RENFREW CO. | | |
| refs. to. | 2, 4, 7, 221 A | xvi | Albite in | 193 | ix |
| Brock tp., ONTARIO CO. | | | Limestone in | 102 B | xiii |
| Peat in. <i>See</i> Cannington. | | | Peristerite in | 206 | ix |
| Trenton limestone in. | 89 B | xiii | Trenton formation in. <i>See</i> Douglas. | | |
| Brockville, ELIZABETHTOWN TP., LEEDS CO. | | | Brompton lake, ORFORD TP., QUE. | | |
| Attempt in, to gasify cordwood. | 484 | R C | Millerite on | 59 B | xiv |
| Brick-yard at | 77 B | xv | <i>Bromus ciliatus.</i> | | |
| Caoxonite from, near | 193 | ii | Ottawa (near) | 225 | x |
| Erie clay at | 10 B | xv | Bronson, E. H. | | |
| Limestone quarries at, notes and analyses | 72, 73 B | xiii | Farming by, Timagami dist. | 172 | ix |
| Marine shells at, and near. | 222 | x | <i>See also</i> Lancaster farm. | | |
| 241, 242 A | xiii | | President, Ottawa Carbide Co. | 21 | x |
| Morainic drift at | 221 | x | Frank. | 21 | x |
| Palaeozoic rocks near. | 22 B | xiii | Bronson, DUNGANNON TP., HASTINGS CO. | | |
| Calcareous formation | 41 | R C | Falls near, photo. | 64, 65 | xi |
| Peat bog at, analyses | 203 | xii | 232 | 233 | viii |
| company formed to work | 227 A | x | farm. See Lancaster farm lake, WISNER TP., NIP. | | |
| idle, 1903 | 29 A | xiii | Beaches near, altitude. | 103 C | xiv |
| notes | 205, 206 | xii | Nickel prospecting near | 152 | x |
| photo | 192 | xii | Norite on | 202 A | xiii |
| Pyrites near, geological relationship. | 182 A | xvi | 73 C | xiv | |
| | | | Brooke tp., LAMBTON CO. | | |
| | | | Oil in, boring for | 15 | viii |
| | | | 24 A | xiii | |
| | | | 111 A | xv | |
| | | | Brooke's weed-killer. | 115 | xi |
| | | | Brookholm, SARAWAK TP., GREY CO. | | |
| | | | Clay in, for cement | 32 | xii |
| | | | 17 B | xiii | |
| | | | Brooklin, WHITBY TP., ONT. | | |
| | | | Ballast pits at | 238 A | xiii |

| | Page. | Vol. |
|--|---------------|------|
| "Brooklyn" ss..... | 186, 187 | iv |
| Brooklyn Nickel Works. | | |
| Tests at, on nickel-steel..... | 145 | ii |
| Brooks, A. S. | 263 | v |
| | 74 A | xvi |
| Annie | 115 | ix |
| | 140 | x |
| T. H. | 115 | ix |
| Hudson Silver Mg Co. | | |
| Capital and date of charter..... | 29 A | xvi |
| lake, MICHIPICOTEN DIV., ALG. | | |
| Dolomite north of..... | 157 | xi |
| Iron range on and near..... | 154, 173 | xi |
| notes by Coleman | 161, 162 | xi |
| Broomhead, Barnard Platts | | |
| Evidence by, <i>re</i> royalties in Gt. | | |
| Britain..... | 25 | i |
| Brophy, A. | 31 | v |
| | 38 | vi |
| G. P. | 24 | x |
| J. B. | 24 | x |
| Brosowski peat-digger. | 216 | ii |
| | 209 | xii |
| Brothers, John. | 255 | ii |
| Brotherton, G. H. | | |
| Manager for Algoma Commercial | | |
| Co. | 139 | x |
| | 265, 266 | xi |
| Sawbill g. m. | 64 | vii |
| Mining in Michipicoten div..... | 115 | ix |
| | 140 | x |
| | 73 | xi |
| Brotherton hill, NEAR PAINT LAKE, | | |
| MICHIPICOTEN DIV., ALG. | | |
| Muskeg at foot of..... | 315 A | xiv |
| Rocks of..... | 329, 354 A | xiv |
| Trough at..... | 339 A | xiv |
| Brough, B. H. | | |
| Notes by, on treatment of iron | | |
| ore, Sweden..... | 338 | xii |
| <i>ref. to</i> | 341 | xii |
| Brougham tp., RENFREW CO. | | |
| Graphite in..... | 199 | ix |
| mining..... | 30 | v |
| | 25 A | xvi |
| <i>See also</i> Black Donald mine. | | |
| Limestone in..... | 101 B | xiii |
| Broughton, W. K. (H B.C.) | | |
| Acknowledgments to..... | 196 | viii |
| House and family of, photo..... | 200, 201 | viii |
| Broughton tp., BEAUCO CO., QTE. | | |
| Asbestos in, analysis..... | 97 | iii |
| Brout, W. A. | 231 | iv |
| Brower tp., Nnt. | | |
| Soil and timber in..... | 126 A | xv |
| Brown, Andrew F. | | |
| Gold mining by, Michipicoten | | |
| div..... | 102 | vii |
| | 102 | viii |
| | 115 | ix |
| | 113, 115, 140 | x |
| | 65, 80 | xi |
| | 48 A | xiii |
| C. Barrington. | | |
| <i>See also</i> Judd, J. W. | | |
| Notes by, on rubies..... | 241 | viii |
| C. L. | 160 | x |
| C. T. | 124 | vii |

| | Page. | Vol. |
|---|----------|------|
| Brown, D. N. | 63 A | xv |
| Daniel | 272 | xi |
| David. | 121 | R C |
| | 52 B | xiii |
| David H. <i>See</i> Browne. | | |
| E. <i>See</i> Black Jack Mg. Co. | | |
| Edgar | | |
| Iron mining by, Anjigomi lake... 179 A | | xv |
| Francis R. F. | | |
| Notes by, on Aikman peat process | 199, 200 | i |
| Gerald C. | | |
| Surveying by, for the Montreal | | |
| Co..... | 34 | R C |
| | 139 | vi |
| J. | | |
| Brick-making by, Carlton West. 107 B | | xv |
| J. C. (of N. Z.) | 513, 520 | R C |
| James | | |
| <i>See also</i> Brown and Zimmerman. | | |
| Quarrying by, Stamford tp. | 96 | i |
| Part owner, Craig gold mine.... | 92 | vii |
| John | | |
| Quarry of, Thorold..... | 164 A | xiv |
| analysis of limestone | | |
| from..... | 15, 16 B | xiii |
| Joseph | 113 | i |
| Lucius P. | 296 | xi |
| Mrs. | 48 | iii |
| Prof. R. T. | 115 | iii |
| Samuel | 98 | ii |
| T. F. | | |
| Evidence by, <i>re</i> royalties in Gt. | | |
| Britain..... | 37, 38 | i |
| T. M. | 43 A | xiii |
| Thomas | | |
| Timberman, Massey Station mine | 32 A | xv |
| Thor | | |
| Provincial silver mine discovered | | |
| by..... | 10 A | xvi |
| & Co. (PITTSBURG) | | |
| Labour employed by, statistics... 370 | | R C |
| Iron output of, 1893..... | 119 | ii |
| and Zimmerman. | | |
| Limestone quarrying by, Stamford | | |
| tp..... | 96 | i |
| | 119 B | xiii |
| Bros. | | |
| Brick-making by, Carlton West. 107 B | | xv |
| Mount Denis. | 29 | xii |
| hematite. <i>See</i> Limonite. | | |
| lake, N. OF L. SUPERIOR, TH. | | |
| B. D. | | |
| Rocks north of..... | 304 A | xiv |
| Browne, David H. | | |
| Chemist to Copper Cliff mine.... | 270 | v |
| | 16 C | xiv |
| Evidence by, before R. C..... | 121 | R C |
| Manager, Copper Cliff smelter... 63 A | | xvi |
| Notes by, on smelting at Copper | | |
| Cliff..... | 65 A | xvi |
| Polydymite analysed by..... | 159 C | xiv |
| Jane | 102 | viii |
| | 115 | ix |
| | 140 | x |
| | 73 | xi |
| R. H. C. | 31 A | xvi |
| Browning, A. G. | 68 | vi |
| | 46 | xii |

| | Page. | Vol. |
|---|--------------|--------|
| Brownsville, DEREHAM TP., OXFORD CO. | | |
| Brick-yard at, notes | 86, 87 | B xv |
| Bruce ? | 115 | xi |
| co. | | |
| Brick-making in, notes by Baker | 59, 60 | B xv |
| Erie clay of, character | 126 | iii |
| Limestone in, Corniferous | 25 | B xiii |
| notes by Miller | 34 | B xiii |
| Salt works in, number of, 1897 | 24 | vii |
| 1898 | 17 | viii |
| Copper Mines, Ltd. | | |
| Capital and date of charter | 10 | x |
| mines, BRUCE MINES, ALG. | | |
| <i>See also</i> Bruce Mines village and Bruce Mines dist. | | |
| Bornite in | 212 | vi |
| 195 | ix | |
| Calcite in | 195 | ix |
| Chalcocite in | 196 | ix |
| Copper in, mode of occurrence | 88 | R C |
| 175 | i | |
| Copper pyrites in | 212 | vi |
| Cost of mining at | 66 | iii |
| Diamond drilling in | 16 | A xvi |
| Dolomite crystals at | 198 | ix |
| Evidence <i>re</i> , before R.C. 168, 92 | 100 | R C |
| Exhibits of, at Pan-American Exhibition | 86 | xi |
| Failure of, causes | 18, 96, 101 | R C |
| 177 | ii | |
| Gold in ore of | 25 | R C |
| History of, detailed | 94-96 | R C |
| early | 91 | i |
| Mill of, photo | 144, 145 | x |
| Map of, sketch | 91 | R C |
| Mi-pickel in | 205 | ix |
| Nomenclature of | 96 | R C |
| Notes on, 1898 | 38 | viii |
| 1899 | 94, 95 | ix |
| 1900 | 118, 119 | x |
| 1901 | 269, 270 | xi |
| 1902 (idle) | 98 | xii |
| 1903 | 81 | A xiii |
| and photos | 70-72 | A xvi |
| by Bell | 23 | R C |
| Blue | 35, 36 | iii |
| Coleman | 125 | viii |
| Merritt | 91 | R C |
| Palmer | 174 | ii |
| Operating, 1901 | 23 | xi |
| 1905 | 47 | A xv |
| 1906 | 15 | A xvi |
| Output | 101 | R C |
| 171 | i | |
| 122 | iv | |
| 209 | v | |
| 22 | xi | |
| Purchased by Copper Mfg. and Smelting Co | 12, 68 | A xv |
| Quartz-crystals from | 208 | ix |
| Smelting operations at | 378, 402-404 | R C |
| System of working | 94 | R C |
| Taken over by an English Co. | 37 | x |
| Unwatered, 1898 | 18 | viii |
| Mines village, ALG. | | |
| <i>See also</i> Bruce Mines dist. | | |
| Agricultural land near | 103 | iv |

Bruce Mines village.—Con.

| | | |
|--|----------|--------|
| Boulders at, jasper-conglomerate | 156 | viii |
| Description of | 36 | iii |
| Forest fire at, 1864 | 206 | v |
| Rocks at and near | 72 | i |
| 158-162 | viii | |
| Huronian | 253 | v |
| thickness | 17 | R C |
| greenstone dike, photo | 136 | viii |
| quarried for road metal | 125, 169 | viii |
| paper by Blue | 13-16 | v |
| Coleman | 125 | viii |
| Terraces near, altitude | 152, 155 | viii |
| Mines & Algoma Railway Co. | 119 | x |
| Mines dist. | | |
| Copper mines in, notes by Coleman | 124, 125 | viii |
| Iron mining in, 1897 | 97 | vii |
| Bruchmueller, W. | | |
| Early history by, of cobalt industry in Saxony | 74-90 | B xiv |
| Brudenell, BRUDENELL TP., RENFREW CO. | | |
| Cambro-Silurian at | 104 | B xiii |
| tp., RENFREW CO. | | |
| Corundum in, character | 241 | vii |
| crushing curve of | 240, 241 | vii |
| crystals, photo | 222 | vii |
| notes by Blue | 246 | viii |
| Miller | 221 | vii |
| Grenville series in | 56 | A xiii |
| Nepheline-syenite in | 226, 229 | vii |
| Titanite in | 211 | ix |
| Zircon in | 212 | ix |
| Bruges, BELGIUM. | | |
| Peat used in, for sanitation | 216 | i |
| Brughat—? | | |
| Calorific power of fuels given by | 201 | iii |
| Brule, C.P. Ry., R.R.D. | | |
| Gold mining east of. <i>See</i> New Klondike. | | |
| Rocks near | 169 | vii |
| granitoid-gneiss | 124 | vii |
| creek, CONNEM TP., TH.B.D. | | |
| Pyrites mining on | 107 | x |
| harbour, L. SUPERIOR. | | |
| Copper mining near | 63 | xi |
| Eruptive rocks on and near | 191 | A xv |
| Gold mining east of | 101 | vii |
| lake, SHEBANDOWAN LAKE DIST., TH.B.D. | | |
| Description of, by Blue | 137 | v |
| portage, BETWEEN BARIL AND BRULE LAKES, TH. B. D. | | |
| Forest fire at | 205 | v |
| river, BRULÉ BAY, L. SUPERIOR. | | |
| Character of | 176 | A xv |
| Brumell, H. Peareth H. | | |
| Notes by, on Petrolea oil wells | 113 | A xiv |
| Report by, on oil and gas, extract ref. to | 89 | A xiv |
| Brunel, Sir I. K. | 118 | A xiv |
| tp., P.S.D. | | |
| Boring in, for copper and nickel | 59 | xi |
| <i>Brunella vulgaris.</i> | | |
| Abitibi dist | 242 | A xiv |
| Mattagami valley | 150 | A xv |

| | Page. | Vol. | | Page. | Vol. |
|---|-----------|-------|---|-------|-------|
| Brunner, ELLICE TP., PERTH CO. | | | Buck=deer rapid, ARBITBI RIVER. | | |
| Peat bog at, analysis..... | 203 | xii | Character of..... | 186 A | xiv |
| idle, 1903..... | 29 A | xiii | Country around, description..... | 205 A | xiv |
| notes..... | 205 | xii | Hornblende-gneiss at..... | 206 A | xiv |
| photo..... | 192 | xii | Notes on river near..... | 181 | viii |
| plant for, destroyed | | | Photo. of river near..... | 229 A | xiv |
| by fire..... | 32 A | xiii | Soil from, analysis..... | 246 A | xiv |
| Brunswick, GERMANY. | | | Bucke Silver and Cobalt Mg. Co. | | |
| Peat used in, for sanitation..... | 216 | ii | Capital and date of charter..... | 29 A | xvi |
| post, MISSINAIBI RIVER, ALG. | | | tp., Nip. | | |
| Country near, description..... | 139, 140 | ix | Cobalt in..... | 11, | 86 A |
| river, MISSINAIBI RIVER, ALG. | 195 | viii | Map of..... | | 97 A |
| Brunton, J. D. | | | Rocks in, breccia, photo..... | 41, | 45 B |
| Peat process of..... | 207 | ii | columnar structure..... | | 38 B |
| Brush, Prof. George J. | 505 | R C | greenstone, photos..... | 42, | 43 B |
| Brussels, GREY TP., DURHAM CO. | | | slate..... | | 40 B |
| Salt at..... | 54, | 55 | photo..... | | 37 B |
| boring for..... | 185 | R C | Silver deposits in, notes by Miller | | 96 A |
| notes by Rogers..... | 188 | R C | mining..... | | 7 A |
| works..... | 22 A | xiii | Smaltite in..... | | 28 B |
| | 20 A | xiv | Buckeye Portland Cement Co. | | |
| Oil Co. | | | Composition of impervious mor- | | |
| Capital and date of charter..... | 29 A | xvi | tar given by..... | 173 A | xiv |
| Bruyne, Armand de. | 49 A | xvi | Buckham Bay, CARLETON CO. | | |
| Bryan, H. J. | 102 | viii | Cambro-Silurian rocks near..... | 38 B | xiii |
| | 115 | ix | Buckhorn, KENT CO. | | |
| | 140 | x | Boring near, for water..... | 127 | i |
| Bryant, Samuel H. | 245 | iv | Buckhout, N. W. | 338 | xii |
| | 68 A | xvi | Buckingham, Lieut. B. H. | | |
| Bryce, Rt. Hon. James | 4 | vii | 171, 175, 178, | 179 C | xiv |
| Brydges bay, BIG-STONE BAY, L. OF | | | Mg. Co..... | 436 | R C |
| THE WOODS..... | 173, 175, | 177 | Buckingham, OTTAWA CO., QUE. | | |
| <i>Bryozoa.</i> | | | Mica mining near..... | 86 A | xiv |
| Paris, Ont..... | 91, | 92 B | tp., OTTAWA CO., QUE. | | |
| Rockford..... | 143 | xii | See also Emerald apatite mine. | | |
| Thedford..... | 154 | xii | Apatite in, mining..... | 169, | 436 |
| | 69 B | xiii | mode of occurrence.. | 178 | R C |
| Walpole tp..... | 143 | xii | Buckland —? | | |
| Woodstock..... | 148 | xii | Peat-drying process of..... | 196 | i |
| Bryson, John | 44 | x | Buckley, H. | 140 | x |
| LITCHFIELD TP., QUE. | | | | 73 | xi |
| Leaf silver near..... | 207 | vi | | 65 | xii |
| island, L. TIMISKAMING, QUE. | | | | 48 A | xiii |
| Limestone on..... | 85 B | xiii | J. P. | 65 | xii |
| Syenite near..... | 104 B | xiii | | 48 A | xiii |
| BTO 1 iron location, E. of L. NIP- | | | lake, DOURO TP., PETERBOROUGH CO. | | |
| IGON, TH. B. D. | | | Marl from..... | 16 | x |
| Analysis of ore from: rocks in, | | | | 32 | xi |
| dip..... | 114, | 145 A | Bucknell, mine, L. TIMISKAMING... | 149 A | xiv |
| BTO 3 and BTO 4 iron locations, | | | Buckshot creek, MISSISSIPPI RIVER, | 50 A | xvi |
| E OF L. NIPIGON, TH. B. D. | 123, | 132 A | ONT. | | |
| Bubbling Water, MISSINAIBI RIVER, | | | Rocks on, strike of..... | 203 | xi |
| ALG. | | | Buckthorn lake, PETERBOROUGH CO. | | |
| Natural gas at..... | 128 | iv | Limestone escarpment in..... | 97, | 113 B |
| <i>Bubo virginianus.</i> See Owl, great | | | Bucyrus Brick and Terra Cotta Co. | | |
| horned | | | Analysis of shale used by..... | 119 | iii |
| Buchanan, A. P. | | | Budd, J. B. | 321 | R C |
| Gold mining by, Manitou Lake | | | Buddle. | | |
| reg..... | 62 | ix | Description of..... | 529 | R C |
| President, Glass Reef G. Mg. Co. | 99 | x | Budischie, Anthony | 55, | 57 |
| C. G. | | | Buell, Elbert L. | 34 | xii |
| Magnetic iron ore separator of | | | | 19 B | xiii |
| | 346, 347 | R C | | 139 A | xiv |
| | 328 | xii | John | | |
| Thomas | | | Brick-yard of, Thornbury..... | 66 B | xv |
| Brick-making by, Port Credit... | 89 B | xv | Buffalo. | | |
| Buck lake, LOUGHBORO TP., FRONTE- | | | Rainy Lake dist., scarce..... | 97 | iv |
| NAC CO. | | | Remains of, in Desjardins canal. | 229 A | xlii |
| Mica in..... | 98 | vii | | | |
| mining. See Stoness mine. | | | | | |

| | Page. | Vol. |
|--|--------------------|------|
| Buffalo, U. S. | | |
| Brick pavements in | 108 | iii |
| Exhibition at, 1901. <i>See</i> Pan-American Exhibition. | | |
| Gas in, record of wells | 161, 162 | i |
| piped to, from Ont. | 128 | i |
| | 91 A | xiv |
| | 23 A | xv |
| | 25 A | xvi |
| Lower Helderberg formation at | 153 | xii |
| Sulphuric acid works at | 184 A | xvi |
| Water-line series at | 118 B | xiii |
| Chief | | |
| Photo of | 184, 185 | viii |
| and Leamington Oil and Gas Co. | | |
| Capital and date of charter | 21 A | xiv |
| Exhibits of, at Buffalo | 25 A | xv |
| Well of, Mensea tp | 116 A | xiv |
| Consolidated Gold Mg. Co. | | |
| Capital and date of charter | 9 | ix |
| gold mine, EAGLE LAKE, R. R. D. | | |
| Notes on, 1903 | 65 A | xiii |
| Mg. and Development Co. | | |
| Capital and date of charter | 9 | viii |
| Mining Co. | | |
| Capital and date of charter | 29 A | xvi |
| Dividends, 1903-7 | 13 A | xvi |
| Exhibits of, at Pan-American Exhibition | 25 A | xv |
| Owners, American silver mine, Cobalt | 7 A | xv |
| Producing, 1901 | 8 A | xvi |
| Shipping, 1905 | 15 B | xiv |
| <i>See also</i> Buffalo silver mine. | | |
| Natural Gas Fuel Co. | | |
| Notes on, 1890 | 133 | i |
| Northwestern Gold Co. | | |
| Capital and date of charter | 9 | viii |
| silver mine, COBALT, NIP. | | |
| Notes on and photos of | 76-78 A | xv |
| Bugs. | | |
| Abitibi dist. | 129 A | xiii |
| lace | | |
| Abitibi dist | 128 A | xiii |
| spittle | | |
| Abitibi dist | 129 A | xiii |
| Buhr-stone. | | |
| Definition of | 529 | rc |
| Building stone. | | |
| <i>See also</i> Structural material. | | |
| Canada, production, 1870 | 209 | rc |
| 1880 | 209 | rc |
| 1881-1887 | 241 | rc |
| 1886 | 213 | rc |
| 1887 | 209, 213, 229, 243 | rc |
| 1888 | 72, 525 | rc |
| Credit Forks | 43, 73, 74, 79 | rc |
| Exhibit of, at Pan-American Exhibition | 87, 88 | xi |
| World's Fair, notes on | 186 | ii |
| Evidence <i>re</i> , before R. C. | 79-88 | rc |
| "Great Huronian belt," notes by Bell | 93 | i |
| Gravel formation | 45 | rc |
| Imports of,—why import? | 15 A | xiv |

Building stone.—*Con.*

| | | |
|--|----------------|------|
| Industry of, 1890, paper by Blue | 95-107 | i |
| 1906 | 18, 19 A | xvi |
| Lake Superior, N. shore, evidence before R. C. | 61, 62 | rc |
| Peninsula | 113 | vi |
| Medina formation | 43, 73 | rc |
| Notes on, by Merritt | 72-78 | rc |
| Paper on, by Coleman | 133-136 | iii |
| Rainy Lake region | 76 | iv |
| Statistics, 1870, 1880 | 210 | rc |
| 1887 | 210, 229 | rc |
| 1891 | 6 | i |
| 1892 | 7, 11 | ii |
| 1893 | 6, 10 | iii |
| 1894 | 11, 12 | iv |
| 1895 | 11 | v |
| 1896 | 11-13 | vi |
| 1897 | 15-17 | vii |
| 1898 | 11-13 | viii |
| 1899 | 13 | ix |
| 1900 | 11, 12, 14 | x |
| 1901 | 12, 13, 30 | xi |
| 1902 | 12, 13, 27, 28 | xii |
| 1903 | 2, 13 A | xiii |
| 1904 | 1, 3, 15 A | xiv |
| 1905 | 1, 4 A | xv |
| 1906 | 3, 6, 19 A | xvi |
| United States, production, 1887 | 213 | rc |
| 1888 | 525 | rc |

See also Structural material.**Bulgaria.**

| | | |
|--|------------|------|
| Nickel coinage in | 161 | ii |
| Bull, Price & Co. | | |
| Gold mining by, Seine river | 67 | v |
| bay, MISSISSAUBI RIVER, ALG. | | |
| Rocks on | 138, 143 A | xiii |
| =dog gold mine, L. OF THE WOODS, R. R. D. | | |
| Mill erected at | 235 | ii |
| Notes on, by Blue | 25, 26 | iii |

=dog tabanus.

| | | |
|-------------------------------|-------|------|
| Abitibi dist. | 128 A | xiii |
| river, S. CAROLINA. | | |
| Apatite deposits on | 441 | rc |

"Bulletin du Commerce."

| | | |
|---|------|-----|
| Extract from, <i>re</i> cobalt industry | 72 B | xiv |
|---|------|-----|

Bullets.

| | | |
|----------------------------------|----------|----|
| Arsenic for hardening g. | 114, 117 | xi |
| Nickel | 146, 147 | ii |

See also Ammunition.**Bullion gold mine, N. E. OF KENORA, R. R. D.**

| | | |
|---|----|----|
| Mining Co. <i>See</i> Gold Bullion Mg. Co. | 36 | ix |
|---|----|----|

No. 2 gold mine, SHOAL LAKE, L. OF THE WOODS.

| | | |
|--------------------------|----|----|
| Depth of, 1899 | 35 | ix |
| Idue, 1900 | 79 | x |
| Notes on, 1899 | 67 | ix |

Number Two Mg Co.

| | | |
|---|----|----|
| Capital and date of charter | 9 | ix |
| Directors of | 79 | x |
| Work by. <i>See</i> Bullion No. 2 gold mine | | |

| | | |
|--|-----|----|
| Bullock Manufacturing Co. | 168 | iv |
|--|-----|----|

| | Page. | Vol. | | Page. | Vol. |
|---|----------|------|---|------------|------|
| Bully Boy gold mine, CAMP BAY, L. OF THE WOODS. | | | Burgess tps.—<i>Con.</i> | | |
| Depth of, 1900..... | 35 | ix | Apatite in — <i>Con.</i> | | |
| Idle, 1898..... | 60, 276 | viii | mining, 1904..... | 86 A | xv |
| 1899..... | 51 | ix | evidence before R. C. | | |
| 1900..... | 73 | x | 167, 168, 174-180 | | R C |
| Notes on, 1904..... | 45 A | xiv | Asbestos in..... | 195 | ix |
| 1905..... | 58 A | xv | Barytes in..... | 53 | R C |
| Work at, 1906..... | 60 A | xvi | 195 | | ix |
| Bulmer, H. | 16 | iii | Chalcopyrite in..... | 196 | ix |
| Bulstrode, BULSTRODE TP., ARTHA-BASKA CO., QUE. | | | Corundum in..... | 194 | ii |
| Peat drying experiments at..... | 198, 203 | i | 197 | | ix |
| 198, 206 | | ii | discovery..... | 242 | viii |
| Bunn, Charles | 50 | v | exhibited at World's Fair..... | 190 | ii |
| 105 | | vi | notes..... | 62 | vi |
| and Scovil claim, BAG BAY, SHOAL LAKE, L. OF THE WOODS | 87 | v | 214, 218 | | vii |
| Bunting, Robert | 118 | R C | Graphite in..... | 199 | ix |
| Bur marigold. | | | Iron ore in, specular..... | 138 | R C |
| Abitibi dist..... | 253 A | xiv | Limestone from, analysis..... | 70 B | xiii |
| Burchard, John E. | 74 A | xiii | Loganite from, analysis..... | 201 | ix |
| 71 A | | xv | Meerschaum in..... | 138 | R C |
| Burdette, D. B. | | | Mica in..... | 203 | ix |
| <i>See also</i> Northern Gold Co. | | | mining, 1893..... | 194 | iii |
| Winnipeg Consolidated mine. | | | 1895..... | 276-278 | v |
| Gold mining by, L. of the Woods. | 116 | R C | 1897..... | 98 | vii |
| 20-24 | | iii | 1900..... | 131, 132 | x |
| President, Northern Gold Co.... | 232 | ii | 1901..... | 289, 290 | xi |
| Bureau of Mines. | | | 1903..... | 91, 93 A | xiii |
| Act creating, ref. to..... | 4 | i | 1904..... | 85 A | xiv |
| Award to, Pan-American Exhibition..... | 89, 90 | xi | 1905..... | 104, 105 A | xv |
| Correspondence statistics of, 1892. | 12 | ii | 1906..... | 87-89 A | xvi |
| Duties of..... | 228 | ix | evidence before R. C. | | |
| Establishment of, recommended. | xxiv | R C | 148, 150 | | R C |
| Objects of..... | 407, 408 | R C | phlogopite..... | 207 | ix |
| Burford, BURFORD TP., BRANT CO. | | | <i>See also</i> Martha mica mine and Levett and Davis mica mine. | | |
| Post-glacial gravel east of..... | 142 | xii | Orthoclase in..... | 205 | ix |
| tp., BRANT CO. | | | Perthite in..... | 194 | ii |
| Corniferous formation in..... | 46 | R C | 206 | | ix |
| Burgarde & Son, F. | | | Pyroxene in..... | 207 | ix |
| Pottery of, Egmondville, photo. | 119 B | xv | Ruby crystals in..... | 228 | vi |
| Burgess, A. C. | 112 | vii | Serpentine in..... | 209 | ix |
| D..... | 73 | xi | Sphene (Titanite) in..... | 242 | ix |
| F. D..... | 89 A | xv | Spinel and Sulphur in..... | 210 | ix |
| G. A..... | | | Tremolite and Turgite in..... | 211 | ix |
| Brick-yard of, Carleton Place... | 75 B | xv | Wilsonite in..... | 212 | ix |
| George V. | 74 | ix | Wollastonite in..... | 194 | ii |
| gas well, E. TILBURY TP., KENT CO. | | | 212 | | ix |
| Notes on, by Knight..... | 99 A | xvi | Burjorkova, HUNGARY. | | |
| Mines, CARLOW TP., HASTINGS CO. | | | Gasifying of wood in, for iron smelting..... | 484 | R C |
| Corundum mining at..... | 21 A | xvi | Burke, D. F. | | |
| tps., LEEDS AND LANARK COS., ONT. | | | Evidence by, <i>re</i> free-trade..... | 233 | R C |
| Albite in..... | 193 | ix | mining laws..... | 312 | R C |
| Anhydrite in..... | 193 | ix | technical instruction..... | 426 | R C |
| Apatite in..... | 172 | R C | Gold mining by, near Jackfish..... | 266 | vi |
| 242 | | viii | thanks to..... | 260 | vii |
| 191 | | ix | 282 | | viii |
| <i>See also</i> Otter mica mine. | | | Stevenson | | |
| Otty lake. | | | Evidence by, <i>re</i> nickel, before Pingley tariff committee..... | 45 | vi |
| character of veins..... | 440 | R C | Burketon, DARLINGTON TP., DURHAM CO. | | |
| mining, 1892..... | 251, 252 | ii | Stratified deposits at, altitude..... | 223 | x |
| 1893..... | 195 | iii | Burkhardt, Hans | 86-88 B | xiv |
| | | | Burks Falls, ARMOUR TP., P. S. D. | | |
| | | | Brick-yard at..... | 88 B | xv |
| | | | Iron near, boring for..... | 31 A | xiv |
| | | | Nickel mining near..... | 286 | xi |

| | Page. | Vol. | | Page. | Vol. |
|--|---------------|------|--|------------|------|
| Burleigh Falls, BURLEIGH TP., PETERBORO CO. | | | Burnt Knoll. — <i>Con.</i> | | |
| Granite and lithographic-stone near | 213 | viii | See also B. Mount gold mine. | | |
| Limestone escarpment S. of | 97 B | xiii | Ledyard gold mine. | | |
| Water-power at | 213 | viii | lake, W. OF RAINY LAKE, R. R. D. | | |
| tp., PETERBORO CO. | | | Keewatin rocks on | 61 | iv |
| See also Burleigh Falls. | | | narrows, CLEARWATER LAKE, R. R. D. | | |
| Corundum in | 205 | viii | Rocks near | 83 | iv |
| Magnetite in, analysis | 202 | ix | River, SOMERVILLE TP., VICTORIA CO. | | |
| Peristerite in | 206 | ix | Black River formation near | 113, 114 B | xiii |
| Rocks in | 212, 213 | viii | river, BALSAM LAKE, VICTORIA CO. | | |
| Tourmaline from, exhibited at Chicago | 190 | ii | Iron ore on | 52 | R C |
| Burley, T. S. | 115 | ix | Smelting works on. See Kinmount. | | |
| gold mine, BALD INDIAN BAY, L. OF THE WOODS. | | | Burntwood portage, ABITIBI RIVER. | 184 | viii |
| Crib of, description | 53 | viii | Burpee tp., MANITOULIN ISLAND, ALG. | | |
| photos | 16, 17 | vii | Mica prospecting in | 280 | v |
| 32, 33 | | ix | Burritt lake, METHUEN TP. See Barrett lake. | | |
| Depth of, 1899 | 35 | ix | Burrough Larder Lake Gold Mg. Co. | | |
| Notes on, 1897 | 48, 115 | vii | Capital and date of charter | 28 A | xvi |
| 1898 | 46, 47, 52-54 | viii | Burrows, A. G. | | |
| 1899 | 42 | ix | Analyses and assays by of : | | |
| 1903 | 60 A | xiii | Cobalt ores | 99, 100 A | xiii |
| Plans and section of | 64, 65 | viii | Throughout Pt. B | xiv | |
| Gold Mining Co. | | | gravel and sand, Savant lake | 90 | xii |
| Capital and date of charter | 7 | vii | gypsum, Moose river | 159 A | xiii |
| Officers of | 52 | viii | iron ores, Animikie range | 168 A | xv |
| Burlington, DES MOINES CO., IA. | | | Nipigon Lake dist. | 144 A | xvi |
| Faving clay from, analysis | 120 | iii | Steep-rock lake | 306 | xii |
| Burlington, RACINE CO., WIS. | | | limestone, Animikie range | 163 A | xv |
| Diamonds from (reported) | 121 | ix | Ontario. Throughout Pt. B | xiii | |
| bay, HAMILTON. | 29 | iv | eastern | 156 | xii |
| heights, HAMILTON. | | | marl, N. of Montreal river | 209 A | xiv |
| Description of | 228 A | xiii | peat, Abitibi dist. | 209 A | xiv |
| Iroquois beach at | 229, 238 A | xiii | Mattagami valley | 128 A | xv |
| Burma. | | | pyrites, Darling tp. | 154 A | xvi |
| Corundum and rubies of | 62 | vi | various | 150 A | xvi |
| 213 | | vii | rocks, Abitibi dist. | 117, 118 A | xiii |
| notes | 229-233, 241, | viii | Animikie range | 171 A | xv |
| Oil-field of, ref. to | 115 | i | Appointment of, 1902 | 4, 72 | xii |
| Burnard, T. K. | 60 A | xvi | 1903 | x A | xiii |
| Burnet, R. L. | 31 | ix | Assistant in Assay office, 1901 | 79 | xi |
| Burnette—? | 78 A | xvi | Dyscrasite found by, in Cobalt | | |
| Burnham—? | 48 | iii | ores | 98 A | xiii |
| Burns, J. C. | 273 | xi | Notes by, on pyrites on Mattagami river | 180 A | xvi |
| 81 A | | xiii | samples from Grace | | |
| J. E. | 54 A | xiv | g. m. | 68 | xi |
| Robert | 218 | i | Report by, and Wells, on Assay | | |
| 34 | | v | office, 1902 | 68-72 | xii |
| S. R. | 118 B | xv | 1903 | 50, 51 A | xiii |
| mica mine. See Byrnes mica mine. | | | 1904 | 31-34 A | xiv |
| Burnside, T. E. | 295 | xi | 1905 | 36-38 A | xv |
| 39, 42, 94 A | | xv | 1906 | 47, 48 A | xvi |
| Thomas | 154 A | xvi | Surveys by, Mattagami valley, | | |
| Burnt island, L. TIMISKAMING See Mann island. | | | ref. to | 122 A | xv |
| island, MINNITAKI LAKE, R. R. D. | | | Arthur S. | 95 | ix |
| Gold mining on | 70 | viii | Burstall, Edward | 21 | ii |
| island, L. SUPERIOR. | | | Burt, T. | 102 | vii |
| Photo of part of | 128, 129 | vi | Burton, E. B. | | |
| Silver Islet vein in | 34, 35, 197 | R C | Iron mining by, Aberdeen tp. ... | 143 | R C |
| 138, 153 | | vi | Jones & Co. | 169 | iv |
| Knoll, BELMONT TP., PETERBORO CO. | | | tp., P. S. D. | | |
| Gold mining at | 51 | iii | Limestone in | 93 B | xiii |

| | Page. | Vol. |
|--|--------------------|------|
| Burwash, Edward M. | | |
| Jaspilite found by, Shining-tree lake..... | 167, 178, 182, 183 | x |
| Mikado gold mine visited by..... | 105 | vi |
| Report by, on the Geology of the Nipissing-Algonia line..... | 167-177 | vi |
| Work by, 1895..... | 47, 75, 95 | v |
| Dr. John | 40 | iv |
| Burwash, SUSSEX, ENG. | 356 | R C |
| lake, TIMAGAMI FOREST RESERVE, NIP. | | |
| Ancient valley north of..... | 182 | vi |
| Iron ore on..... | 15 A xv | |
| | 16, 74 A xvi | |
| Map of, sketch..... | 170 | vi |
| Rocks around..... | 171 | vi |
| Striae on, direction..... | 181 | vi |
| Busck, Herr | 211 | ii |
| Bush, C. | 102 | vii |
| | 102 | viii |
| | 115 | ix |
| E. | 102 | viii |
| Flora | 115 | ix |
| Myron P. | 156 | vi |
| bay, FRONTENAC CO. | | |
| Rocks near..... | 43, 44 B xiii | |
| Winning gold mine, NEAR | | |
| MINE CENTRE, R. R. D. | 83 | viii |
| Bushell, William | | |
| Brick-making by, Carlton West.. | 107 B xv | |
| Bushnell Oil Co. | 17 | vii |
| Business lake, TIMAGAMI DIST., NIP. | | |
| Jaspilite near..... | 171 | x |
| Bussman-Gray Molybdenum Mg. and Reduction Co. | | |
| Capital and date of charter..... | 37 A xiii | |
| Buster Brown Oil and Gas Co. | 25 A xv | |
| Butchart, A. S. | | |
| Manager, North American Chemical Works..... | 110 | i |
| President, AD2 Gold Mg. Co..... | 129 | vii |
| Superintendent, Lakefield Portland Cement Co..... | 31 | xii |
| | 17 B xiii | |
| R. P. | 108 | ix |
| | 32 | xii |
| | 148 A xiv | |
| Butcher, H. | | |
| Brick-making by, Peterboro..... | 95 B xv | |
| Buteman, Thomas | 515 | R C |
| Butler lake, WHITE-CLAY RIVER, ABITIBI RIVER. | | |
| Description of, by Bolton..... | 184 | xii |
| Butler, R. R. D. | | |
| Route from, to Sturgeon lake..... | 147, 148 | xi |
| Butt tp., NIP. | | |
| Mica mine in..... | 172 | ix |
| Butte, SILVERBOW CO., MONTANA. | | |
| Coal in, price of..... | 111 | ii |
| Butterfield, D. W. | | |
| Evidence by, before R. C. <i>re</i> :..... | | |
| Dakota School of Mines..... | 424 | R C |
| Vermilion mine..... | 105, 113 | R C |
| G. S. | 73 | xi |
| Butterflies. | | |
| Abitibi dist..... | 129 A xiii | |
| Buttes, The. <i>See</i> Creighton nickel mine. | | |
| Buttrey, L. H. | 102 | viii |

| | Page. | Vol. |
|--|---------------|------|
| Butwell Bros. | | |
| Brick-making by, Toronto..... | 110 B xv | |
| Buxton, E. T. | 140 | x |
| —?..... | 57 A xvi | |
| Buzzo, B. E. | 265 | xi |
| | 60, 63 | xii |
| Byers, B. M. & Co. | | |
| Iron output of, 1893..... | 118 | ii |
| Labour employed by, statistics..... | 370 | R C |
| Bygrove (CROSBY) iron mine, N. | | |
| CROSBY TP., LEEDS CO. 35, 44-46, 50 | | ii |
| Byng inlet, GEORGIAN BAY. | | |
| Rocks near..... | 67, 79 | i |
| Byrne, F. P. | 41 | xi |
| Byrnes, Patrick. <i>See</i> Byrnes mica mine. | | |
| mica mine, N. BURGESS TP., LANARK CO. | | |
| Notes on, 1903..... | 91 A xiii | |
| Prospecting in, 1904..... | 85 A xiv | |
| 1905..... | 103 A xv | |
| Surface work on, 1900..... | 132 | x |
| 1901..... | 290 | xi |
| Byron tp., MICHIGICOTEN DIV., TH. B. D. | | |
| Description of shores of..... | 134 | viii |
| Tin salting in..... | 138, 139 | viii |
| <i>Byrrhus ottawensis.</i> | | |
| Ottawa..... | 32 B xv | |
| Greens creek..... | 224 | x |
| Byskoven, LANRVIK, NORWAY. | | |
| Lanrvikite from, analysis..... | 211 | xi |
| Byssolite. <i>See</i> Asbestos. | | |
| Bytownite. | | |
| Bathurst tp..... | 195 | ix |
| Seine River dist..... | 100 | v |
| South Sherbrooke tp..... | 226 | viii |
| | 195 | ix |
| analysis..... | 227 | viii |
| Tudor tp., rock resembling..... | 199 | xi |
| Byturns, pale brown | | |
| Abitibi dist..... | 128 A xiii | |
| Cabbage. | | |
| Mentioned as growing at:— | | |
| Fort Matachewan..... | 240 A xiv | |
| Fort Mattagami..... | 121 A xiii | |
| Garden River, near..... | 197 | viii |
| Goulais River valley..... | 197 | viii |
| Lac des Mille Lacs..... | 114 | v |
| Mississagi river..... | 164 | xii |
| New Post, Abitibi dist..... | 186 | viii |
| Night-hawk lake..... | 123 A xiii | |
| Rainy river..... | 163 | v |
| butterfly. | | |
| Abitibi dist..... | 129 A xiii | |
| Cabin Branch pyrites mine, NEAR DUMFRIES, VIRGINIA. | | |
| Thickness of lenses in..... | 192 A xvi | |
| Cabot head, GEORGIAN BAY. | | |
| Hematite at..... | 140 | xi |
| Rocks at..... | 35, 36 B xiii | |
| Cachemere. <i>See</i> Kashmir. | | |
| Cacoxenite. | | |
| Elizabethtown tp..... | 195 | ix |
| Brockville..... | 193 | ii |

| | Page. | Vol. | | Page. | Vol. |
|--|---------------|------|---|---------------------|------|
| Cactus. | | | Calcareous formation.—<i>Con.</i> | | |
| <i>L.</i> of the Woods..... | 96 | iv | Notes on, by Bell..... | 41 | R C |
| 51..... | v | | Position of, in Silurian..... | 2 | R C |
| Rainy lake..... | 96 | iv | 22 B xiii | | |
| 51..... | v | | Renfrew co..... | 114 B xiii | |
| Cadham, J. G. | 136 | i | Thickness of, in oilfields..... | 96 A xiv | |
| Cadioux, Damase | 255 | ii | Calcite (CALC SPAR). | | |
| Caen, NORMANDY, FRANCE | 529 | R C | <i>See also</i> Iceland spar. | | |
| Cain, Caesar | 47 | xii | Annaberg, Saxony..... | 61, 62 B xiv | |
| Brick Co. | | | Association of, with apatite..... | 438, 442 | R C |
| Capital and date of charter..... | 25 A xv | | Barrie tp., cutting crystalline | | |
| Clay used by, analysis..... | 31 B xv | | limestone..... | 206 | xi |
| Yard of, notes..... | 47 B xv | | Bruce mines..... | 175 | ii |
| photo..... | 61 B xv | | Coleman tp., analysis..... | 23 B xiv | |
| Cainozoic. <i>See</i> Tertiary. | | | Dean lake, Thompson tp..... | 69 A xv | |
| Cairngorm (SMOKY QUARTZ). | | | Determination of..... | 205, 222 | vi |
| Description of..... | 221 | vi | Exhibit of at World's Fair..... | 187 | ii |
| Calabogie, BAGOF TP., RENFREW CO. | | | Hardness of..... | 448, 535 | R C |
| Graphite near. <i>See</i> Black Don- | | | 202 | vi | |
| ald gr. mine. | | | 214 | vii | |
| Iron ore near, mining. | | | Lanark tp..... | 193 | ii |
| <i>See also</i> Calabogie iron mine; | | | Madoc tp., gold nuggets in..... | 28 | R C |
| Wilson iron mine. | | | North Burgess tp..... | 440 | R C |
| 1897..... | 234 | vii | Nova Scotia, gold-bearing..... | 67 | R C |
| 1899..... | 103 | ix | Occurrences of..... | 195, 196 | ix |
| tests on, with Wetherill separa- | | | Orford tp., Que., with millerite. | 213 | vi |
| tor..... | 336 | xii | Port Colborne..... | 14 B xiii | |
| Summer mining class at..... | 55, 56 | xii | Specific gravity of..... | 202 | vi |
| iron mine, CALABOGIE, REN- | | | Test for..... | 450 | R C |
| FREW CO. | | | Calcium. | | |
| Notes on, by Merritt..... | 128 | R C | Proportion of, in earth's crust.... | 447 | R C |
| Ore from, at World's Fair..... | 79 | ii | carbide. | | |
| Output of..... | 135 | R C | Industry of, 1896..... | 6 | vi |
| lake, RENFREW CO. | | | Lime for..... | 2, 3, 4 B xiii | |
| Asbestos near..... | 195 | ix | Limestone for, from Port Col- | | |
| Iron mining near..... | 59 | ii | borne and Sherkeston..... | 116 B xiii | |
| notes by Campbell | | | Manufacture and uses of..... | 32-41 | v |
| 136, 137 | R C | | 27-32 | vi | |
| Limestone north of..... | 102 B xiii | | 19-22 | vii | |
| Tale near..... | 210 | ix | 18 A xiii | | |
| Mining Co. | | | notes by Blue..... | 139-141 | iv |
| Capital and date of charter..... | 7 | vii | paper by Lewes..... | 142-151 | iv |
| Exhibit from, at Pan-American | | | Wilson and Suckert | | |
| Exhibition..... | 86 | xi | 152-166 | iv | |
| Notes on, by J. S. Campbell..... | 136 | R C | of at St. Catharines..... | 18 A xiii | |
| Work by, 1895..... | 275 | v | Statistics of, 1897..... | 15 | vii |
| 1899..... | 103 | ix | 1898..... | 11 | viii |
| 1900..... | 129 | x | 1899..... | 13 | ix |
| Calamine (ZINC SILICATE). | | | 1900..... | 11, 12, 21 | x |
| Description of..... | 529 | R C | 1901..... | 12, 13, 36 | xi |
| Hardness of..... | 202 | vi | 1902..... | 12, 13, 37 | xii |
| Hints on, to prospectors..... | 460 | R C | 1903..... | 2, 4, 18, 19 A xiii | |
| Notes on, by Goodwin..... | 210 | vi | 1904..... | 1, 3, 18, 87 A xiv | |
| Specific gravity of..... | 202 | vi | 1905..... | 1, 4, 23 A xv | |
| Calc spar. <i>See</i> Calcite. | | | 1906..... | 3, 6, 25 A xvi | |
| Calcareous marl. <i>See</i> Marl. | | | Works for, Merritt..... | 140 | xii |
| spar. <i>See</i> Calcite. | | | Ottawa..... | 296 | * xi |
| tufa. | | | 140 | xii | |
| Occurrences of..... | 196 | ix | carbonate. <i>See</i> Calcite. | | |
| Calcedony. <i>See</i> Chalcedony. | | | chloride. | | |
| Calcic carbide. | | | Lime used in making..... | 5 B xiii | |
| Composition and cost of..... | 145, 147 | iv | fluoride. <i>See</i> Fluorspar. | | |
| <i>See also</i> Acetylene gas. | | | phosphate. <i>See</i> Apatite. | | |
| Calcareous formation. | | | silicate. <i>See</i> Wollastonite. | | |
| Carleton co..... | 37 B xiii | | sulphate. <i>See</i> Gypsum. | | |
| Dundas co..... | 40 B xiii | | sulphite. | | |
| Glengarry co..... | 46, 47 B xiii | | Sault Ste. Marie, for paper mak- | | |
| Grenville co..... | 48 B xiii | | ing..... | 61, 62 | x |
| Lanark co..... | 70, 72 B xiii | | | | |

| | Page. | Vol. | | Page. | Vol. |
|---|---------|---------|---|----------|--------|
| Calco King Mining Co. | | | Caledon tp.—<i>Con.</i> | | |
| Capital and date of charter..... | 9 | x | Limestone in..... | 95 | B xiii |
| Calder, George..... | 80 | vi | Cambro-Silurian..... | 39 | B xiii |
| James..... | 88 | vii | Marl in..... | 16 | x |
| Lake Mining Co. | | | 160 | A xiv | |
| Capital and date of charter..... | 9 | viii | Sandstone quarrying in..... | 99 | i |
| tp., SUDBURY DIST. | | | <i>See also</i> Credit Forks. | | |
| Timber in..... | 145 | A xv | Caledonia, SENECA TP., HALDIMAND | | |
| Caldwell, John F. | | | co. | | |
| Manager, Sultana g.m..... | 7 | Bull. i | Gypsum near..... | 122 | R C |
| 179 | v | | 38 | xii | |
| 93-96, 117, 251 | vi | | quarried..... | 252 | iv |
| 46 | vii | | 23 | x | |
| 51 | viii | | Mineral spring at, analysis..... | 201, 205 | ix |
| 57 | A xv | | Natural gas at, 1892..... | 20 | x |
| Owner, Sultana g. m..... | 231 | ii | 1894..... | 252 | iv |
| 16-19 | iii | | 1895..... | 283 | v |
| 227 | iv | | notes by Walker..... | 281 | vi |
| 238 | v | | gypsum mine, ONEIDA TP., | | |
| 6 | vii | | HALDIMAND CO. | | |
| 52 | viii | | Notes on, 1890..... | 113 | i |
| 38, 39 | ix | | Iron works (MONTREAL). | | |
| 96 | xii | | Peat used at for smelting..... | 207 | i |
| 59 | A xiii | | Natural Gas Co. | | |
| Thomas B. | | | Capital of..... | 281 | v |
| Calabogie iron mine owned by .. | 115 | xii | Wells of..... | 20 | x |
| Iron ore exhibited by, at World's | | | Springs, CALEDONIA TP., PRES- | | |
| Fair..... | 78 | ii | COTT CO. | | |
| prospecting by, Gunflint | | | Peat at..... | 197 | ii |
| Lake dist..... | 68 | ii | tests, deodorizing system; at | | |
| prospecting by, Timagami | | | 190, 191 | vi | |
| dist..... | 20 | xii | tp., PRESCOTT CO. | | |
| 31 | A xiv | | Peat in..... | 197 | ii |
| 26, 88 | A xv | | thickness..... | 190 | i |
| Caldwell, William C. | | | <i>See also</i> Caledonia Springs. | | |
| Evidence by, before R. C., <i>re</i> :— | | | Trenton limestone in..... | 98 | B xiii |
| bonuses on iron smelting..... | 393 | R C | Caley, C. W. | 102 | vii |
| iron ores, Lavant tp..... | 140 | R C | Calico. | | |
| tariffs..... | 233 | R C | Arsenic used in..... | 120 | xi |
| technical education..... | 427 | R C | California, U.S. | | |
| Iron ore exhibited by, at World's | | | Asbestos in..... | 98, 99 | iii |
| Fair..... | 78, 80, | ii | Diamonds in..... | 120 | ix |
| Owne, Wilbur mine..... | 104 | ix | Gold in, boring for..... | 164 | iii |
| 127 | x | | cost of placer mining..... | 258 | vii |
| 260 | xi | | mode of occurrence..... | 71 | iv |
| William M. | | | gypsum in..... | 119 | R C |
| Captain, Regina g. m..... | 182 | v | platinum in..... | 142 | vii |
| Manager, Cameron Island g. m.. | 55 | vii | School of Agriculture. | | |
| 68 | viii | | Notes on, by Mather..... | 506 | R C |
| Jubilee g. m..... | 122 | vii | University. | | |
| Work by, 1895, Empress g. m.... | 266 | v | Notes on, by Richards..... | 511 | R C |
| & Co. See Caldwell, Thos. B. | | | <i>Calla pub-stris.</i> | | |
| Caldwell, GRATTAN TP., RENFREW CO. | | | Abitibi dist..... | 241 | A xiv |
| Iron mine near..... | 82 | A xvi | <i>Callinema bellatula.</i> | | |
| notes by Goodwin..... | 55 | xii | Kwataboahegan river..... | 186 | A xiii |
| <i>See also</i> Radnor mine. | | | " <i>lichas.</i> | | |
| Grove well, ANDERDON TP., | | | Cayuga, N. tp..... | 146 | xii |
| ESSEX CO. | | | Hagersville..... | 145 | xii |
| Log of boring in..... | 42 | B xiii | <i>Callopora.</i> | | |
| iron mine, LAVANT TP., LAN- | | | Hamilton..... | 141 | xii |
| ARK CO. | | | Port Colborne..... | 36 | xi |
| Map showing location of, notes | | | <i>Calluna vulgaris.</i> | | |
| on..... | 140 | R C | Germany, peat bogs..... | 213 | ii |
| pt., L. SUPERIOR. | | | Caim lake, SEINE RIVER. See Non- | | |
| Rocks and minerals at, notes by | | | watin lake. | | |
| Coleman..... | 149 | ix | Calorific power. | | |
| Caledon tp., PEEL CO. | | | Carbon..... | 185 | i |
| Brown stone quarrying in..... | 110 | ix | Fuels, various..... | 166 | vi |
| Calcareous tufa in..... | 196 | ix | Wood..... | 54 | B xv |

| | Page. | Vol. |
|--------------------------------------|-----------------|------|
| Calpac, St. Clair Co., Mich. | | |
| Peat plant at..... | 28 A | xiii |
| <i>Call a palustris.</i> | | |
| Abitibi Lake dist..... | 241 A | xiv |
| Mattagami valley..... | 150 A | xv |
| Calumet and Algoma Mg. Co. | | |
| Capital and date of charter..... | 25 A | xv |
| and Hecla Copper mine, L. | | |
| Superior. | | |
| Concentric flow-wrinkles at..... | 37 | R C |
| Conglomerates of..... | 242 | ii |
| Daily output from..... | 455 | R C |
| Notes on, by Coleman..... | 144, 145 | ix |
| Ore of, character..... | 36, 37 | R C |
| | 83 | iii |
| Porphyr pebbles in..... | 38 | R C |
| Cobalt Mg. Co. | | |
| Capital and date of charter..... | 28 A | xvi |
| island, OTTAWA RIVER. | | |
| Blueite (?) from..... | 282 | xii |
| | 160 C | xiv |
| Cobalt ores on..... | 103 A | xiii |
| Rocks on..... | 104 B | xiii |
| Silver on, leaf..... | 207 | vi |
| Zinc-blende on..... | 210 | vi |
| | 87 | ix |
| Calvert, F. H. | 102 | viii |
| tp., Nip. | | |
| Rocks in..... | 206, 210, 212 A | xiv |
| Soil and timber of..... | 204, 228 A | xiv |
| analysis..... | 246 A | xiv |
| sandy..... | 197 A | xiv |
| windfalls..... | 199 A | xiv |
| Calvin, Hiram A. | 178 | iii |
| tp., Nip. | | |
| Beryl in..... | 195 | ix |
| Mica in, mining..... | 195, 196 | iii |
| muscovite..... | 205 | ix |
| <i>See also</i> Eanclaire. | | |
| Polyerose in..... | 207 | ix |
| Xenotime in..... | 212 | ix |
| <i>Calymene.</i> | | |
| Cayuga, N. tp..... | 146 | xii |
| Walpole and Townsend tps..... | 143, 144 | xii |
| <i>phalys.</i> | | |
| Kwahataboahogan river, notes | | |
| by Parks..... | 190 A | xiii |
| <i>Calypso borealis.</i> | | |
| Abitibi dist..... | 241 A | xiv |
| Calyx drill. | | |
| Advantages of..... | 233 | v |
| Description of, mode of working..... | 55 | x |
| <i>C. marolae ia tellys.</i> | | |
| Anderdon tp..... | 125 | xi |
| Kawataboahogan river..... | 186 A | xiii |
| " Cambria " ss..... | 18 | vii |
| Cambria (WALES). | | |
| Cambrian system called after..... | 31, 530 | R C |
| Iron Co. | | |
| Analysis by, of iron ores from:— | | |
| Belmont tp..... | 130 | R C |
| | 61 | ii |
| Glamorgan and Snowdon tps..... | 131, 132 | R C |
| Cambrian. | | |
| Canada, thickness of..... | 195 | v |
| Distribution of..... | 169 | i |
| Nomenclature of..... | 530 | R C |
| Notes, by Bell, on rocks of..... | 31 | R C |

| | Page. | Vol. |
|--|-----------|------|
| Cambrian.—Con. | | |
| Sub-divisions of..... | 2 | R C |
| Sudbury dist., anthraxolite in..... | 3, 6 Bull | ii |
| | 159 | vi |
| Thunder Bay silver dist., silver in..... | 63 | R C |
| Cambridge Gold Mg. Co. | | |
| Capital and date of charter..... | 9 | ix |
| Cambro-Silurian. | | |
| Sub-divisions of..... | 96 A | xiv |
| <i>See also</i> the sub-divisions. | | |
| Camden, CAMDEN CO., N. J. | | |
| Nickel refinery at..... | 27 | vii |
| <i>See also</i> Wharton, Joseph & Co. | | |
| tp., KENT CO. | | |
| Contact, Laurentian-Silurian in..... | 27 B | xiii |
| tp., ADDINGTON CO. | | |
| Cement works in. <i>See</i> Stratheona. | | |
| Limestone in. <i>See</i> Newburgh. | | |
| Cameron, A. | 115 | ix |
| | 140 | x |
| | 65 | xii |
| | 48 A | xiii |
| Alexander | | |
| Copper prospecting by, L. Superior..... | 194 | R C |
| Bros. | | |
| Lime manufactured by, Delta... .. | 72 B | xiii |
| "Caribou"..... | 54, 67, | iii |
| D..... | 53 A | xvi |
| D. C..... | 57 | ix |
| | 79 | x |
| Ian | | |
| Manager, Blezard mine..... | 217, 255, | ii |
| Cameron mine..... | 273 | v |
| Worthington mine..... | 246 | iv |
| | 273 | v |
| Notes by, on nickel-steel..... | 145 | ii |
| supply..... | 147 | ii |
| Views of, on Ontario mining law..... | 227 | ii |
| J. O. | 48 A | xiii |
| John | 107, | v |
| W. J. | 55 | vii |
| W. M. | | |
| Lime-kilns of, Carleton Place... .. | 28 | xii |
| analysis of stone | | |
| burnt in..... | 70 B | xiii |
| notes on..... | 72 B | xiii |
| <i>See also</i> Cameron Bros. | | |
| Hon. William | | |
| Lithographic stone quarry of, | | |
| Marmora tp..... | 138 | iii |
| & Co. (N. Y.) | | |
| Gold mining by, L. of the Woods | 50 | vi |
| copper mine, NEAR DESBARATS, | | |
| ALG. | | |
| Rocks of..... | 188 | x |
| gold mine, CAMERON ISLAND, | | |
| L. OF THE WOODS. | | |
| Accident in, 1899..... | 31 | ix |
| Depth of, 1899..... | 35 | ix |
| Mining class at..... | 281 | viii |
| Notes on, 1898..... | 44, 45, | viii |
| Photos of..... | 64, | ix |
| Preparations for re-starting..... | 62 A | xiii |
| | 47 A | xiv |
| gold mine, MALONE, HASTINGS | | |
| CO. | 110 | R C |

| | Page. | Vol. | | Page. | Vol. |
|--|---------|------|---|----------|------|
| Cameron iron mine, CHANDOS TP., PETERBORO CO. | | | Campbell, Sir Alexander | | |
| Ore from, exhibited at World's Fair | 82 | ii | Notes by, re police force, Hast- ings dist. | 55 | iii |
| island, L. OF THE WOODS. | | | Alfred A. | | |
| <i>See also</i> Cameron g. m. | | | Notes by, on Richardson gold mine. | 54, 55 | iii |
| Gold mining on, 1897 | 54, | vii | Archibald H. | 174 | ii |
| 1898. | 68, | viii | Sir Arthur. | xi | R C |
| 1899 | 60 | ix | C. | 17 | ii |
| 1900, idle. | 79 | x | Duncan. | 125, 127 | i |
| 1903. | 62 A | xiii | J. B. | | |
| Island Mg. and Dev. Co. | | | Evidence by, before R. C. re:— | | |
| Capital and date of charter. | 8 | vii | apatite, Monmouth tp. | 173 | R C |
| Re-organized, 1899 | 60 | ix | hardwood, Haliburton dist. | 395 | R C |
| Work by, 1898. | 44, | viii | marble " | 83 | R C |
| 1903. | 62 A | xiii | mining " | 132 | R C |
| lake, N. OF L. SUPERIOR, TH. B. D. | | | Gold mining by, L. of the Woods. | 58 | ix |
| Fault west of | 311 A | xiv | J. S. | | |
| Iron ore near | 336 A | xiv | Iron mining by, Oso tp. | 276 | v |
| Minor refs. to | 285, | xiv | Notes by, on Calabogie iron mine | 136, | R C |
| Rocks on, and near | 316 A | xiv | President, Calabogie iron mine. . | 275 | v |
| lake, TRILL TP., ALG. | | | J. W. | 103 A | xvi |
| Rocks near. | 196 A | xiii | James Edwin. | 91 | iii |
| nickel-bearing. | 23 C | xiv | John | | |
| lake, VICTORIA CO. | | | Mechanic for Canadian Copper Co. | 64, | xi |
| Trenton fossils near. | 113 B | xiii | John | | |
| nickel mine, BLEZARD TP., NIP. | | | Mica mining by, near Waubamik | 279 | v |
| Notes on | 273 | v | John. | | |
| Rocks in | 55 C | xiv | Rapids on York Branch river | | |
| tp., NIP. | | | named after. | 221 | viii |
| Amazonite in | 193 | ix | John S. | 75, | vii |
| Iron in, native. | 200 | ix | K. | 102 | vii |
| Perthite in | 206 | ix | Mat. | 97, | xvi |
| Cammell, Charles & Co. | | | N. | 102 | viii |
| Armour plates of. | 365 | R C | 140 | x | |
| 150-155 | iii | | Neil | 38, 39, | vii |
| Camp bay, WHITEFISH BAY, L. OF THE WOODS. | | | 63, | 277 | viii |
| Camp on, photo | 80, | vi | 91 | x | |
| Gold mining on, 1896. | 100, | vi | Norman. | 64 | xi |
| 1897. | 45, | vii | P. C. | | |
| 1898. | 60, 61, | viii | Evidence by, before R. C. re:— | | |
| 1899 | 50-52 | ix | free-trade. | 231 | R C |
| 1905 | 4 A | xv | iron near Echo lake. | 143 | R C |
| 1906 | 60 A | xvi | minerals, Sudbury dist. | 59 | R C |
| Rocks on | 118 | vi | Waters tp. | 112 | R C |
| Bay and Crow Lake Ry. | 50 | ix | mining laws. | 310 | R C |
| Bay Gold Mg. Co. | | | Iron ore shown by, at World's Fair. | 80 | ii |
| Capital and date of charter. | 25 A | xiv | T. | 65 | xii |
| Producing, 1905. | 4 A | xv | 48 A | xiii | |
| Bay Mg. Co. | | | William. | 65, 156, | v |
| Capital and date of charter | 37 A | xiii | R. & Sons. | | |
| Combined gold m. owned by ... | 63 A | xiii | Pottery works of, notes. | 120 B | xv |
| 58 A | xv | | -Blomfield claim, MARMORA TP., HASTINGS CO. | | |
| Minor ref. to. | 4 A | xiv | Notes on, by Chapman. | 104 | xi |
| lake, MICHIPICOTEN DIV., ALG. | | | -Crawford Cobalt Silver Mg. Co. | | |
| Rocks near | 338 A | xiv | Capital and date of charter | 28 A | xvi |
| lake, NORTH OF OSOQUAN, R. R. D. | | | gold mine, NEAR MINE CENTRE. | | |
| Country near, character | 147 | xi | <i>See</i> Golden Crescent g. m. | | |
| <i>Campanula aparinoides.</i> | | | island, WHISKEY LAKE, ALG. | | |
| Abitibi dist. | 241 A | xiv | Dimensions of; rocks of; copper prospecting on | 64, 65 A | xiv |
| Mattagami valley | 151 A | xv | rapid, YORK BRANCH RIVER. | | |
| " <i>rotundifolia.</i> | | | Nepheline-syenite near | 221 | viii |
| Abitibi dist. | 241 A | xiv | | | |
| Campbell, A. D. | 102 | vii | | | |
| A. H. | 104 | xi | | | |

| | Page. | Vol. |
|--|---------|------------|
| Campbell tp., ALG. | | |
| Actinolite in. See Grimsthorpe. | | |
| Campbellford, SEYMOUR TP., NOR- | | |
| THUMBERLAND CO. | | |
| Beaches at..... | 235, | 237 A xiii |
| altitude..... | 233 A | xiii |
| Gravel deposits near..... | 231, | 232 A xiii |
| Campbellville, NASSAGAWEGA TP., | | |
| HALTON CO. | | |
| Brick-clay at..... | 229 | R C |
| Medina..... | 16 | v |
| | 29 | xii |
| works..... | 103, | 104 i |
| <i>Campeloma.</i> | | |
| Toronto..... | 230 A | xiii |
| Campement D'Ours island, LAKE | | |
| MURON. | | |
| Native iron near..... | 200 | ix |
| Rocks near, notes by Coleman .. | 159 | viii |
| Canada. | | |
| Apatite of, character..... | 189 | ii |
| paper by Penrose..... | 436-443 | R C |
| Archaean rocks of, area..... | 193 | v |
| | 160 | vii |
| distribution .. | 245 | v |
| notes by Ven- | | |
| nor..... | 41-44 | ii |
| Boundary line between, and U.S., | | |
| position of in L. St. Clair | 108 | v |
| Business relations with U. S..... | 220 | R C |
| Cement in, standard..... | 168, | 169 A xiv |
| Exports of, to U.S., 1881-1887.... | xvii | R C |
| Imports of, from U.S., 1887..... | 468 | R C |
| Iron ores of, notes by Birkin- | | |
| bine..... | 343, | 344 R C |
| synopsis of a report | | |
| by Harrington.. | 52 | ii |
| statistics of:— | | |
| consumption, 1868-1886 | 397 | R C |
| 1888 | 369 | R C |
| exports, 1885-1888..... | 225 | R C |
| production, 1887..... | xviii | R C |
| Laurentian system of, notes by | | |
| Bell..... | 245-249 | v |
| Lithographic stone of, analysis.. | 183 | ii |
| Map of..... | 12, | 13 B xiv |
| Mineral exports of, 1881-1887..... | 244-254 | R C |
| production, 1870, 1880. | | |
| 1887..... | 209 | R C |
| 1874-1886..... | 214 | R C |
| 1886, 1887..... | 243 | R C |
| 1887, 1888..... | xvii | R C |
| 1888..... | 625 | R C |
| statistics, notes on col- | | |
| lection of..... | 414 | R C |
| Mining laws and regulations of:— | | |
| evidence before R. C. | 263-277 | R C |
| notes by commissioners..... | 254-276 | R C |
| Mining schools in, notes on, 1890. | | |
| | 213-217 | i |
| Railways in, mileage of, 1891.... | 110 | ii |
| Roads in, awful..... | 103 | iii |
| Statue representing, at Pan- | | |
| American exhibition | 87 | xi |
| and United States Oil and | | |
| Gas Co. | | |
| Capital and date of charter..... | 28 A | xvi |
| bird. | | |
| Timagami Lake dist | 58 | R C |

| | Page. | Vol. |
|--|---------|---------------|
| Canada Consolidated Gold Mfg. Co. | | |
| See also Deloro, Dominion, Gat- | | |
| ling and Consolidated gold | | |
| mines. | | |
| Deloro g. m. operated by..... | 58 | vi |
| Gold prospecting by, Marmora | | |
| tp. | 106, | 107 R C |
| | 94, | 263 v |
| Minor ref. to..... | 52 | x |
| Mispickel worked by, Marmora | | |
| tp. | 105 | xi |
| Consolidated Mineral Co. | | |
| Capital and date of charter..... | 11 | xi |
| Copper Co. | | |
| Mines of | 433 | R C |
| evidence before R. C..... | 103, | 104 R C |
| notes by Merritt.... | 89, | 90 R C |
| Purchase by, of Stobie copper | | |
| mine..... | 58 | R C |
| Corundum Co. | | |
| Accident to employees of..... | 40 A | xv |
| Award to, Pan-American exhib- | | |
| ition | 89 | xi |
| Concentrating plant of, photo.... | 84 A | xvi |
| Mining class at claims of..... | 40 A | xiv |
| | 43 A | xv |
| Notes on, 1899 | 20 | ix |
| 1900 | 25, | 130 x |
| 1901 | 37, | 294 xi |
| 1902 | 37, | 135 xii |
| 1903 | 19-21, | 89, 90 A xiii |
| 1904 and photos of | | |
| plant | 74, | 75 A xiv |
| 1905 | 97, | 98 A xv |
| Operating, 1905 | 19 A | xv |
| Work by, Monteagle tp. | 84 A | xvi |
| Raglan tp. | 21 A | xvi |
| Crude Oil Producers. | | |
| Capital and date of charter..... | 5 | xii |
| First Silver Mining Co. | | |
| Capital and date of charter. | 7 | vii |
| Iron Furnace Co. | | |
| Award to, Pan-American ex- | | |
| hibition..... | 86, | 90 xi |
| Bounty payments to, 1900 | 32 | x |
| 1901 | 26 | xi |
| 1902 | 25 | xii |
| Formation of | 25 | ii |
| Furnace of, blown in, 1890..... | 25 | xi |
| description | 102 | ix |
| | 27-30 | x |
| plan of..... | 16 | ix |
| photos | 16 | ix |
| | 16, 160 | 161 x |
| projected..... | 6 | viii |
| See also Midland. | | |
| Limestone quarry of, analysis.... | 110 B | xiii |
| producing..... | 28 | xii |
| Officers of | 17 | ix |
| Radnor iron mine worked by..... | 20, | 47 xii |
| | 77 | xiv |
| | 95 | xv |
| | 16 A | xvi |
| See also Radnor iron mine. | | |
| Work of, early..... | 25 | ii |
| Grattan tp. | 24 | xi |
| Lands Purchase Syn..... | 69 | iii |

| | Page. | Vol. |
|---|--------------|--------|
| Canada Minerals, Limited. | | |
| Capital and date of charter..... | 28 A | xvi |
| Nickel Co. | | |
| Capital and date of charter..... | 9 | ix |
| Holdings of, acquired by Ontario Nickel Co..... | 67 A | xvi |
| Paint Co. | | |
| Arsenic employed by, amount of..... | 111 | xi |
| manufactured by..... | 122 | xi |
| pyrites mine. See Oliver pyrites mine. | | |
| Salt Association. | 191 | R C |
| Sand Lime Pressed Brick Co. | | |
| Capital and date of charter..... | 25 A | xv |
| Silver Mining Co. | | |
| Capital and date of charter..... | 7 | vii |
| Venture Co. | | |
| Original operator's of Deloro g.m. | 58 | vi |
| Canadian Bank of Commerce. | | |
| Cobalt branch of, photo..... | 66 B | xiv |
| Cement Brick Co. | | |
| Capital and date of charter. | 24 A | xiii |
| Coal and Ore Dock Co. | 13 A | xiv |
| Cobalt and Silver Mg. Co. | | |
| Capital and date of charter..... | 29 A | xvi |
| Cobalt Corporation. | | |
| Capital and date of charter..... | 29 A | xvi |
| Copper Co. | | |
| See also the following mines :— | | |
| Clarabelle. Krean Hill. | | |
| Copper Cliff. Lady Macdonald. | | |
| Creighton. McArthur. | | |
| Evans. Stobie. | | |
| Frood. | | |
| Accidents to employees of :— | | |
| 1893..... | 167 | iii |
| 1894..... | 201-213 | iv |
| 1895..... | 236-239, 240 | v |
| 1896..... | 272, 273 | vi |
| 1897..... | 30 | vii |
| 1899..... | 24, 25 | ix |
| 1900..... | 44 | x |
| 1901..... | 49-52 | xi |
| 1902..... | 41-46 | xii |
| 1903..... | 38, 39 | A xiii |
| 1904..... | 25 | A xiv |
| 1905..... | 30, 31 | A xv |
| 1906..... | 33, 35 | A xvi |
| Acknowledgments to..... | 61, 64 | xi |
| Advantages of, over rivals..... | 145 C | xiv |
| Boring plant purchased by..... | 42 A | xiii |
| Capital and date of charter..... | 10 | ix |
| Copper ores to be treated by..... | 8 A | xv |
| plant for, erected..... | 64, 65 | A xv |
| Copper Cliff mine acquired by..... | 135 C | xiv |
| Creighton "..... | 244 | xii |
| Electricity developed by..... | 10 A | xiv |
| Employees of, number, 1898..... | 7 | viii |
| Exhibits of, at Pan-American exhibition..... | 86 | xi |
| Frood mine worked by..... | 57 C | xiv |
| Gold and mispickel mining by, Net lake..... | 173, 174 | ix |
| Historical notes..... | xxii | R C |
| | 284-286 | xii |
| | 136-141 C | xiv |
| by Ritchie..... | 170-172 C | xiv |

Canadian Copper Co.—*Cont.*

| | Page. | Vol. |
|--|-----------------------------|--------|
| Inclusion of, in International Nickel Co. | 21 | xi |
| | 17, 284 | xii |
| Krean Hill mine worked by..... | 64 A | xv |
| Matte produced by, analysis..... | 154 | ii |
| notes by Roberts-Austen..... | 109 | viii |
| Mines and plant of..... | 98 | ix |
| | 123 | x |
| notes, 1897..... | 25, 95-97 | vii |
| 1898..... | 38 | viii |
| 1899..... | 96, 97 | ix |
| and photos, 1901..... | 272, 273, 276-280 | xi |
| 1902..... | 117-120, 272, 273, 288, 289 | xii |
| 1903..... | 208, 209 | A xiii |
| 1905..... | 90, 91, 108 | C xiv |
| 1906..... | 63-66 | A xvi |
| by the president..... | 45 | vi |
| Ores of, as a source of platinum..... | 180 | ii |
| percentage of copper and nickel in..... | 90 | i |
| richer in depth..... | 153 | ii |
| Price of nickel controlled by..... | 59 A | xiii |
| Production of, 1902 (to)..... | 288 | xii |
| 1903..... | 6 A | xiii |
| 1905..... | 12 A | xv |
| increasing..... | 47 A | xv |
| 1906..... | 14 A | xvi |
| increasing..... | 56 A | xvi |
| proportion to other mines..... | 156 C | xiv |
| Quartz mined by, for converter linings..... | 26 A | xvi |
| Refinery of, Cleveland, U.S..... | 131 | ii |
| Sales by, to U.S. Navy..... | 138 | ii |
| Smelting by, methods..... | 378, 379 | R C |
| | 217 | ix |
| good..... | 144 C | xiv |
| Tests by, on nickel-steel..... | 191 | iv |
| Work by, 1893..... | 182, 183 | iii |
| 1895..... | 18 | v |
| 1898..... | 19 | viii |
| 1901..... | 20, 21 | xi |
| 1902..... | 117-120 | xii |
| 1903..... | 83, 84 | A xiii |
| 1904..... | 6, 9, 69-71 | A xiv |
| 1905..... | 8, 11, 63-65 | A xv |
| 1906..... | 63-66 | C xiv |
| Corundum Wheel Co. | | |
| Capital and date of charter..... | 24 A | xiii |
| Electro-Chemical Co. | | |
| Caustic soda made by..... | 14 B | xiii |
| Minor ref. to..... | 92 | xi |
| Plant of, at Sault Ste. Marie..... | 65 | x |
| photo..... | 96, 97 | xi |
| General Electric Co. | | |
| Wilson's acetylene patent acquired by..... | 141 | iv |
| General Industrial and Development Co. | | |
| Capital and date of charter..... | 29 A | xvi |
| Gold Extraction Co. | 99 | viii |
| | 87, 88 | ix |
| Gold Fields Co. | | |
| See also Deloro gold mine. | | |
| Arsenic made by, photo..... | 112, 113 | xi |
| mining by, Marmora tp..... | 197 | xi |

| | Page. | Vol. | | Page. | Vol. |
|--------------------------------------|----------|------|---|------------|------|
| Canadian Gold Fields Co.—Con. | | | Canadian Pacific Railway.—Con. | | |
| Arsenic plant of, photos.... | 112, 113 | xi | Mica boiler covering tested by.... | 32 | v |
| process of, ref. to..... | 29 | xi | Michipicoten div., character of | | |
| Capital and date of charter..... | 8 | vii | country traversed by..... | 9 Bull. | iii |
| | 10 | viii | Rocks on, in Animikie range.... | 160 A | xv |
| Deloro mine purchased by..... | 22 | viii | Stone producing by..... | 28 A | xiii |
| Exhibit of, at Pan-American Ex- | | | L. of the Woods..... | 14 | iii |
| hibition..... | 85, 89 | xi | Sudbury nickel development due | | |
| Govt. drill lent to..... | 52, 56 | x | to..... | 134, 136 C | xiv |
| Mining class of, photo..... | 64, 65 | xi | Woodland div., notes on.... | 108-115 | iv |
| Plant of, closed..... | 18 A | xiii | Peat Fuel Co. | | |
| sold..... | 12 A | xvi | Experiments by, on peat..... | 22 | vii |
| Work by, 1902..... | 14, 36 | xii | | 200 | xii |
| Granite Co. (OTTAWA) | | | Notes on, by Gibson..... | 189 | vi |
| Evidence by, before R. C..... | 83, 84 | R C | Rights given by, to Trent Valley | | |
| Marble quarrying by, near Ren- | | | Peat Fuel Co..... | 22 | ix |
| frew..... | 76, 82 | R C | Portland Cement Co. | | |
| | 102 B | xiii | Analysis of clays and marls used | | |
| Notes by Merritt..... | 74 | R C | by..... | 183 A | xiv |
| Hart Corundum Wheel Co. | | | Capital and date of charter..... | 9 | x |
| Capital and date of charter..... | 25 A | xv | Exhibits of, at Buffalo..... | 88 | xi |
| Iron Co. | | | Formation of..... | 136 A | xiv |
| Capital and date of charter..... | 24 A | xiii | Lime producing..... | 28 | xii |
| Klondike Mg. Co. | | | Notes on, 1902..... | 32, 35 | xii |
| Capital and date of charter..... | 26 A | xv | 1905..... | 136-139 A | xiv |
| Land Co. | | | 1906..... | 116 B | xv |
| Capital and date of charter..... | 24 A | xiv | Operating, 1901..... | 32 | xi |
| Land Emigration Co. | | | 1902..... | 31, 35 | xii |
| | 237 | R C | 1903..... | 17 A | xiii |
| Mica Co. | | | 1905..... | 17 A | xv |
| Work by, 1901..... | 292 | xi | 1906..... | 20 A | xvi |
| Works of, Ottawa, closed..... | 131 | xii | Plant of, erection..... | 16 | x |
| Michigan Gold Mines. | | | notes..... | 18 B | xiii |
| Capital and date of charter..... | 24 A | xiii | photos..... | 136-139 A | xiv |
| Milling and Reduction Co. See | | | Pyrates Co. | | |
| Lake of the Woods Gold and | | | Work by, 1906..... | 80 A | xvi |
| Silver Reduction Co. | | | Rand Drill Co. | | |
| Mineral Co. | | | Work by, for Deloro gold mine.. | 40 | viii |
| Capital and date of charter..... | 7 | vii | Salt Co. | | |
| | 10 | viii | Chief producer, 1902..... | 38 | xii |
| Mines Development Co. | | | Producing, 1902..... | 38 | xii |
| Capital and date of charter..... | 10 | ix | 1903..... | 22 A | xiii |
| Purchase by, of Foley gold mine. | 66 | ix | 1904..... | 20 A | xiv |
| | 81 | x | 1905..... | 21 A | xv |
| Mining Institute. | | | 1906..... | 23 A | xvi |
| Cobalt samples exhibited at.... | 5 A | xv | Can.-Amer. Mg. and Development | | |
| Niagara Power Co. | | | Co. | | |
| Capital and date of charter..... | 25 A | xv | Capital and date of charter..... | 31 A | xvi |
| Northern Ore and Coal Co. | | | Canaries. | | |
| Capital and date of charter..... | 25 A | xv | Abitibi dist..... | 253 A | xiv |
| Northern Railway Co. | | | Canborough Natural Gas Co. | | |
| Exhibit of, at Buffalo..... | 86 | xi | Capital and date of charter..... | 11 | x |
| Opening of, anticipated results.. | 128 | xi | tp., HALDIMAND CO. | | |
| Rocks along, near Atikokan river. | 131 | xi | Natural gas in..... | 91 A | xiv |
| Oil Fields, Ltd. | | | boring for, log..... | 105 A | xiv |
| Capital and date of charter..... | 9 | xii | Cancrinite. | | |
| Oil Refining Co. | | | Dungannon tp.... | 196 | ix |
| Capital and date of charter..... | 11 | xi | Candles. | | |
| | 25 A | xv | Composition of..... | 26 | v |
| Minor ref. to..... | 23 A | xiii | Duty on..... | 232 | R C |
| Operating, 1906..... | 24 A | xvi | Canesda Mineral Water Co. | | |
| Plant erected by, at Petrolea.... | 41 | xi | Capital and date of charter..... | 8 | vii |
| | 40 | xii | Canestoga river, GRAND RIVER, L. | | |
| Production, 1905..... | 22 A | xv | ERIE. | | |
| Pacific Railway. | | | Onondaga limestone on..... | 122 B | xiii |
| Advantages due to..... | 103 | iv | Canfield, CAYUGA N. TP., HALDI- | | |
| of, to Kenora..... | 172 | v | MAND CO. | | |
| Animikie range, culverts made | | | Brick-yard at..... | 66 B | xv |
| from local granite..... | 162 A | xv | | | |
| Eastern division of, description. | 108-116 | iv | | | |

| | Page. | Vol. |
|--|------------|------|
| Canise island, LAKE SIMCOE. | | |
| Limestone on, for burning.... | 89 B | xiii |
| Canker-worm. | | |
| Abitibi dist..... | 129 A | xiii |
| Cannamore, FINCH TP., STORMONT CO. | | |
| Limestone near..... | 111 B | xiii |
| Chazy..... | 47 B | xiii |
| Cannel coal. | | |
| Analysis of standard..... | 184 | i |
| Cannibal lake, ALG. See Windegoa- quinzin lake. | | |
| lake, R. R. D. See Windigoostig- wan lake. | | |
| Cannibalism. See Anthropophagy. | | |
| Canning industry. | | |
| Sulphuric acid for..... | 197 A | xvi |
| Cannington, BROCK TP., ONTARIO CO. | | |
| Peat bog at..... | 35 A | xiii |
| Canoes. | | |
| Photos of Indians making.... | 48, 49 | vi |
| Used by fur-traders, description. | 200 | v |
| Canoe lake, NEAR MINNITARI LAKE, R. R. D. | | |
| Rocks on and near, petrographi- cal notes..... | 95 | v |
| Canal lake, N. OF LAKE DER LAKE, NIP. | | |
| Diabase on, petrography..... | 229 | xi |
| Jasper on, with iron..... | 221, 230 | xi |
| lake, NIP. | | |
| Minor ref. to..... | 112 A | xiii |
| Rocks near..... | 121 A | xiii |
| Canon, THE (LONG PORTAGE) ABITIBI RIVER. | | |
| Augite-syenite at..... | 193 | viii |
| Photo of..... | 200, 201 | viii |
| Canonto Mica and Mineral Co. | | |
| Capital and date of charter..... | 8 | vii |
| South tp., FRONTENAC CO. | | |
| Chalcopyrite in..... | 196 | ix |
| Graphite mining in..... | 203 | xi |
| Hematite in..... | 199 | ix |
| Mica in..... | 203 | ix |
| Canton, STARK CO., OHIO. | | |
| Bricks of, made from Hamilton (Ont.) shales..... | 129 | iii |
| tests on..... | 130 | iii |
| Clay from, analysis..... | 120 | iii |
| Shales from, analysis..... | 119 | iii |
| apatite and mica mine, S. BURGESSES TP., LEEDS CO. | | |
| Diamond drill exploration at.... | 88 A | xvi |
| Notes on, 1893..... | 195 | iii |
| 1897..... | 98 | vii |
| Capatis (INDIAN)..... | 123, 124 A | xv |
| Cape Breton, N. S. | | |
| Coal from, for Ontario..... | 196 | ii |
| Cape Colony. | | |
| Prospecting in, with Govt. drills. | 166 | iii |
| Capelton, ASCOT TP., SHERBROOKE CO., QUE. | | |
| Sulphuric acid made at..... | 177 | R C |
| 153 A | xvi | |
| Tetrahedrite found at..... | 208 | vi |
| Wire-rope tramway at, for mov- ing ore..... | 351 | R C |
| Capillary pyrites. See Millerite. | | |
| Capital Cobalt Mg. Co. | | |
| Capital and date of charter..... | 29 A | xvi |

| | Page. | Vol. |
|--|------------|------|
| Capreol tp., L. WANAPITEI DIST., NIP. | | |
| Farm land in..... | 105 C | xiv |
| Gold prospecting in..... | 256 | vii |
| alluvial..... | 152 | x |
| Rocks in, diabase, petrography.. | 213 A | xiii |
| nickel-bearing..... | 284 | xi |
| 62 C | xiv | |
| notes, by Cuthbert. 202-204 A | xiii | |
| 73, 74 C | xiv | |
| tuff..... | 95 C | xiv |
| Sand plains S. of..... | 193 A | xiii |
| Terraces in..... | 106 C | xiv |
| Capron, Henry | | |
| Paris, Ont., founded by..... | 113 | i |
| Hiram | | |
| Smelting by, with Van Norman. | 320 | R C |
| 13 | ii | |
| Capsella bursa-pastoris. | | |
| Abitibi Lake dist..... | 242 A | xiv |
| Carbert, Charles E..... | 48 | vi |
| Carbide of calcium. See Calcium carbide. | | |
| Willson. See Willson, Thomas Leopold. | | |
| Carbon. | | |
| Calorific power of..... | 185 | i |
| Forms of..... | 165 | vi |
| notes by Goodwin. 218-220 | vi | |
| Proportion of, in glass..... | 118, 119 | xi |
| globe's crust... 447 | R C | |
| anthracitic. See Anthraxolite. | | |
| -dioxide. | | |
| Lime used in manufacture of.... | 5 B | xiii |
| monoxide. | | |
| For nickel-plating..... | 159 | ii |
| Carbon, CARBON CO., WYOMING. | | |
| Coal on..... | 175 A | xiii |
| Carbonaceous shale. See Shale, car- bonaceous | | |
| Carbonate of iron. See Siderite. | | |
| of lead. See Cerusite. | | |
| of silver. | | |
| How to assay..... | 449 | R C |
| of zinc. See Smithsonite. | | |
| schists. | | |
| Windigokan Lake dist., notes by Moore..... | 142, 143 A | xvi |
| Carboneau, Louis..... | 49, 57 | xi |
| Carboniferous system. | | |
| Absence of, in Ontario..... | 180 | i |
| Definition of..... | 530 | R C |
| New Brunswick..... | 196 | ii |
| Carborundum. | | |
| Composition of..... | 39 | xi |
| Price of, 1898..... | 238 | viii |
| United States, production and value..... | 216 | vii |
| Card, A. M..... | 29 | iv |
| Manly W..... | 56, 57 | xi |
| N. B. | | |
| Brick-making by, Brantford.... | 59 B | xv |
| Cardiff, WALES. | | |
| Apatite shipments to, 1884-1885. | 443 | R C |
| tp., HALIBURTON CO. | | |
| Apatite in..... | 194 | ix |
| Iron ore in, analysis..... | 62 | ii |
| railway for develop- ment..... | 61 | ii |

| | Page. | Vol. |
|--|---------------|------|
| Cardiff. — <i>Con.</i> | | |
| Mica in..... | 203 | ix |
| Rocks in..... | 215 | viii |
| Grenville series..... | 56 B | xiii |
| nepheline-syenite..... | 215 | viii |
| Cardinal, EDWARDSBURG TP., GREN- | | |
| VILLE CO. | | |
| Calceiferous formation at..... | 47 B | xiii |
| <i>Cardium islandicum.</i> | | |
| James bay..... | 143 A | xiii |
| <i>Carex magellanica.</i> | | |
| Ottawa, near (fossil)..... | 225 | x |
| Carey, John F. | 263 | xi |
| Cariboo silver mine, PAIPOONGE TP., | | |
| TH. B. D. | | |
| Evidence <i>re</i> , before R. C.... | 199, 200 | R C |
| Galena in..... | 198 | ix |
| Caribou. | | |
| Abitibi dist., scarce..... | 193 | viii |
| | 189 | xii |
| | 253 A | xiv |
| Blanche River region..... | 215 | xi |
| Davenport, remains of, in gravel..... | 229 A | xiii |
| Food of..... | 142 | viii |
| Hinterland, The..... | 133 | iv |
| Hudson Bay slope..... | 178 | vi |
| Moose River basin..... | 178 A | xiii |
| L. Superior, Caribou island..... | 111 | v |
| N. shore..... | 142 | viii |
| Pukaskwa harbour..... | 133 | viii |
| Michipicoten div..... | 297 A | xiv |
| | 200 A | xv |
| Pukaskwa river..... | 137, 138 | viii |
| Mississagi River dist., scarce..... | 172 | xii |
| Rainy Lake dist..... | 97 | iv |
| Timagami Lake dist..... | 58 | R C |
| "Caribou" (SKIFF)..... | 120, 168, 169 | viii |
| Caribou gold mine, NEAR ROSSLAND, | | |
| ONT. | | |
| Notes on, 1898..... | 110 | vii |
| Work on, 1902..... | 234 | ii |
| island, L. SUPERIOR. | | |
| Fishing off, notes on..... | 147 | viii |
| Fowl's eggs on, hatched by gulls..... | 132 | viii |
| Gold prospecting on..... | 209 | v |
| Historical notes..... | 110-112 | v |
| Minor ref. to..... | 143 | viii |
| lake, McCONKEY TP., P. SD. D. | | |
| Copper prospects near..... | 170, 171 | ix |
| Copper pyrites, iron and pyrrho- | | |
| tite on..... | 262 | viii |
| Mica on; trees on..... | 171 | ix |
| lake, NEAR MANTOU LAKE, R. | | |
| R. D. | | |
| Laurentian granite on..... | 50 | iv |
| | 155 | vii |
| petrography..... | 63, 89 | iv |
| Syenite on..... | 52 | v |
| lake, NEAR WHISKEY LAKE, | | |
| ALG. | | |
| Galena on, argentiferous..... | 70 A | xv |
| Carillon canal, N. OF OTTAWA RIVER, | | |
| QUE. | | |
| Stone for, from Ross quarry..... | 99 B | xiii |
| Carinthia, AUSTRIA-HUNGARY. | | |
| Iron smelting in, with charcoal..... | 483 | R C |
| Carl bay, SHOAL LAKE, L. OF THE | | |
| WOODS. | | |
| Gold mining near. <i>See</i> Engledue, | | |
| W. T. | | |

| | Page. | Vol. |
|--|------------|------|
| Carleton co. | | |
| Brick-yards in, notes on..... | 60, 61 B | xv |
| Limestone in, notes by Miller.... | 37 B | xiii |
| Palaeozoic rocks in..... | 40, 41, 43 | R C |
| | 22 B | xiii |
| Peat bog in..... | 197 | ii |
| Place, BECKWITH TP., LANARK | | |
| co. | | |
| Brick-yard at, notes on..... | 75 B | xv |
| Epidote in..... | 198 | ix |
| Iron ore at..... | 68 | R C |
| Lead mining at..... | 145, 146 | R C |
| smelter..... | 175 | i |
| Limestone at, analysis..... | 70 B | xiii |
| kilns and quarries..... | 70, 72 B | xiii |
| Mica-trimming works at..... | 105 A | xv |
| Carling tp., PARRY SOUND DIST. | | |
| Copper ore in..... | 261 | viii |
| | 168 | ix |
| Carll, John F. | | |
| Notes by, on: | | |
| anticlinal theory (gas and | | |
| oil)..... | 148-151 | i |
| exhaustion of natural gas and | | |
| oil..... | 158, 159 | i |
| value of records of borings..... | 163 | i |
| Carlo, B. <i>See</i> Gallucio Bartolomeo. | | |
| Carlos tp., PETERBOROUGH CO. | | |
| Old name for Methuen tp..... | 15 | ii |
| Carlow tp., HASTINGS CO. | | |
| Corundum in..... | 217 | vi |
| | 220, 221 | viii |
| discovery..... | 61, 63 | vi |
| | 207 | vii |
| | 206, 244 | viii |
| inspected by Miller..... | 208 | vii |
| mining, 1902.. | 37, 135 | xii |
| 1903.. | 89, 90 A | xiii |
| 1904..... | 75 A | xiv |
| 1905..... | 99 A | xv |
| notes by Blue.. | 64, 65 | vi |
| | 246 | viii |
| Miller.. | | |
| 211, 219, 220, 224 | | vii |
| photos ... Facing | 222 | vii |
| production, 1904.. | 18 A | xiv |
| 1905.. | 19 A | xv |
| prospecting..... | 84 A | xvi |
| tests on... .. | 239, 240 | viii |
| <i>See also</i> New Carlow. | | |
| Gneiss in, analysis..... | 227 | vii |
| Limestone in, analysis..... | 65 B | xiii |
| Magnetite in..... | 202 | ix |
| Pyroxene in..... | 207 | ix |
| Syenite in..... | 229 | vii |
| | 220 | viii |
| Carlsbad (EASTMAN) Springs, GLOU- | | |
| CESTER TP., CARLETON CO. | | |
| Moss and peat at. <i>See</i> Mer Bleu. | | |
| Carlson, Axel | 238 | v |
| | 66, 249 | vi |
| Nelse..... | 27, 28 | viii |
| W. F..... | 113 | vii |
| Carlton West, YORK TP., YORK CO. | | |
| Brick-yard at, notes on..... | 107 B | xv |
| Pottery works at..... | 29 A | xiii |
| | 118 B | xv |
| Vitrified brick plant at, descrip- | | |
| tion..... | 16 | v |

| | Page. | Vol. |
|---|------------|------|
| Carlton lake, NEAR MANITOU LAKE, R. R. D. Gold mining on. <i>See</i> King Edward mine. | | |
| Carlyle, W. S. | 217 | i |
| tp., ALG. Rocks in..... | 68 | i |
| Carman, Frank J. | 111 A | xv |
| <i>See also</i> Carman and Fairbank. and Fairbank. Oil producing..... | 24 | vi |
| prospecting, Kent and Essex cos..... | 19-21 | vi |
| tp., ALG. Soil in, character..... | 132 A | xiii |
| Trees in..... | 124 A | xiii |
| Carmichael, N. R. | 250 | vii |
| Carmody Bros. Boring by, for gas, Bertie tp..... | 135-138 | i |
| Caledonia... .. | 252 | iv |
| Carnegie, Andrew Notes by, on use of natural gas for glass-making..... | 159 | i |
| <i>See also</i> Carnegie Steel Co. J. H. | 32 | xii |
| Bros. & Co. Labour employed by, statistics... .. | 369 | R C |
| Phipps & Co. Armour plates of, tests on... .. | 36, 137 | ii |
| Labour employed by, statistics.. .. | 369 | R C |
| Steel Co. Armour plates of, cost..... | 144 | ii |
| Labour employed by, statistics.. .. | 369 | R C |
| Steel of, output, 1893..... | 119 | ii |
| sent to England..... | 34 | x |
| tp., ALG. Soil and timber in..... | 120, 141 A | xv |
| Carnelian | 530 | R C |
| Carnsewe —? | 374 | R C |
| "Caro" ss. | 93 | xii |
| Carolinenhorst, NEAR STETTIN, GERMANY. Peat at, notes on working..... | 213 | ii |
| wages for working..... | 195 | ii |
| Caron, F. | 113 | vii |
| Carp, HUNTLEY TP., CARLETON CO. Mica prospecting near..... | 103 A | xv |
| river, BATCHAWANA BAY, L. SUPERIOR. Description of, by Willmott..... | 128 | viii |
| Jasper ore on tribs. of..... | 190 | x |
| Minor ref. to..... | 162 | ix |
| Carpenter, Albert Evidence by, before R.C..... | 86, 235 | R C |
| Carpets. Peat fibre for..... | 215 | ii |
| Carr, J. | 48 A | xiii |
| tp., Nip..... | 109 A | xiii |
| Carrick, F. J. | 102 | vii |
| ..... | 102 | viii |
| tp., BRUCE CO. Boring in, for gas, suggested.... | 21 | x |
| Limestone in..... | 35 B | xiii |
| Corniferous..... | 66 B | xiii |
| Marl in..... | 37 B | xiii |
| Carrie Furnace Co. Labour employed by, statistics.. .. | 370 | R C |
| Carrier, S. N. | 102 | vii |

| | Page. | Vol. |
|---|------------|------|
| Carroll, J. Gold mining by, Manitou lake... .. | 123 | vii |
| Michipicoten div. | 48 A | xiii |
| Robt. | 111 | ix |
| <i>See also</i> Credit Valley Quarry Co. and Vick. Quarrying by, Credit Forks..... | 98 | i |
| <i>See also</i> Credit Valley Quarry Co. Bros. Gas wells and limekilns of, Humbertstone..... | 131 | i |
| ..... | 44 | xi |
| Carron iron works, SCOTLAND | 358 | R C |
| Carrots. Fort Matachewan..... | 240 A | xiv |
| Goulais River valley..... | 197 | viii |
| Night-hawk lake..... | 123 A | xiii |
| Carruthers, J. B. | 178 | iii |
| Science hall, KINGSTON. Photo of..... Facing | 192 | vi |
| Carry siding, C.P.Ry., Michipicoten DIV., ALG. | 3 Bull. | iii |
| Carscallen, A. W. Manager, Belmont g. m..... | 224 | i |
| Notes by, on "....." | 238 | ii |
| Owner of "....." | 48 | iii |
| ..... | 40 | viii |
| ..... | 114 | x |
| ..... | 191 | xi |
| Trustee, mineral collection, Mar-mora..... | 200 | vi |
| Carstlick, J. | 138 | xii |
| Cart lake, COLEMAN TP., NIP. Drainage of..... | 81 A | xv |
| Minor ref. to..... | 52 A | xvi |
| Carter, Frederick | 49, 50, 57 | xi |
| Sir Frederick | 221 | i |
| J. M. Brick-yard of, at St. Catharines.. .. | 77 B | xv |
| James Evidence by, before R.C. <i>re</i> :— Natural gas at Courtright..... | 153 | R C |
| Salt at Courtright..... | 191 | R C |
| duties..... | 237 | R C |
| W. E. H. Acknowledgments to..... | 259 | xii |
| ..... | 16 B | xiv |
| Appointment of, as secretary... .. | 5 | x |
| Catalogue compiled by, for Pan-American Exhibition..... | 88 | xi |
| Paper by, on peat fuel, its manufacture and uses..... | 191-234 A | xii |
| ref. to..... | 27 A | xiii |
| Reports by, as Inspector of Mines. 1900..... | 90-112 | x |
| 1901..... | 231-298 | xi |
| 1902..... | 108-140 | xii |
| 1903..... | 59-72 A | xiii |
| 1904..... | 43-76 A | xiv |
| Report by, on accidents at:— Big Master g. m..... | 46 | xii |
| Shakespeare g. m..... | 26, 27 A | xiv |
| Work by, 1898..... | 174 | viii |
| 1900..... | 6 | x |
| 1901..... | 6, 7 | xi |
| 1902..... | 4 | xii |
| 1903..... | x A | xiii |
| 1904..... | 1 C | xiv |

| | Vol. | Page. | Vol. |
|---|------------------|-------|------|
| Carter and Kittermaster. | | | |
| Operating salt, Windsor..... | 38 xii | | |
| | 22 A xiii | | |
| "Walker process. | | | |
| Description of..... | 238 ii | | |
| Cartier, CARTIER TP., ALG. | | | |
| Gravel plain near..... | 106 c xiv | | |
| Limestone near, for building.... | 94 i | | |
| Magnetite near..... | 87 i | | |
| Mining Co. | | | |
| Capital and date of charter..... | 11 xi | | |
| tp., ALG. | | | |
| Terrace in, altitude..... | 103 c xiv | | |
| Cartmell, William R. | | | |
| Quarrying by, Thorold tp..... | 96 i | | |
| <i>See also</i> Mountain quarry. | | | |
| Cartwright, Major..... | 90 viii | | |
| O. E. | | | |
| Granite prospecting by, near Cape | | | |
| Gargantua..... | 67 iii | | |
| Sir Richard | | | |
| Part owner, Wendigo g.m..... | 44 ix | | |
| | 71 x | | |
| President, Bedford Mg. Co. | 134 R C | | |
| Bullion No. 2 g.m..... | 79 x | | |
| Hammond Reef G.Mg. | | | |
| Co..... | 90 viii | | |
| Carus-Wilson, Charles A..... | 217 i | | |
| Carver, Captain Jonathan | | | |
| Ref. to travels by, L. Superior... | 92 R C | | |
| | 112 v | | |
| Carveth, H. R..... | 236 vii | | |
| Car-wheels. | | | |
| Manufacture of, notes on.... | 328, 329 R C | | |
| Cascade galena mine, GARDEN RIV- | | | |
| ER, ALG. | | | |
| Belt of, same as that of Victoria m. | 29 R C | | |
| Notes on, by Coleman..... | 123 viii | | |
| Skewes..... | 147 R C | | |
| Photo of..... | 136, 137 viii | | |
| Cascaden tp., ALG. | | | |
| Rocks in, diabase..... | 76 i | | |
| nickel-bearing..... | 196 A xiii | | |
| | 64 C xiv | | |
| south of..... | 84 i | | |
| <i>See also</i> Windy lake. | | | |
| Swamps in..... | 193 A xiii | | |
| Casey, P. | | | |
| Beryl found by, Lyndoch tp.... | 235 vii | | |
| Cobalt Silver Mg. Co. | | | |
| Capital and date of charter..... | 28 A xvi | | |
| tp., NIP. | | | |
| Cobalt vein in..... | 11 A xv | | |
| Smaltite in..... | 48 A xv | | |
| Cash, D. G..... | 140 x | | |
| J. S. | 140 x | | |
| Cashel tp., HASTINGS CO. | | | |
| Iron pyrites in, notes by Fraleck. | 163 A xvi | | |
| <i>See also</i> Tudor tp. | | | |
| Casler, J. H..... | 54 A xv | | |
| Cass, J..... | 102 viii | | |
| Casselman, CAMBRIDGE TP., RUSSELL | | | |
| CO. | | | |
| Brick making at, notes and photo | | | |
| | 97, 98 B xv | | |
| Bricks at, price of..... | 15 A xiii | | |
| Clay at, analyses..... | 26, 27 B xv | | |
| photo..... | 25, 26 B xv | | |
| Saugeen..... | 19, 20 B xv | | |
| Cassiar Coal Development Co. | | | |
| Capital and date of charter..... | 8 xii | | |
| Cassidey, J. H..... | 252 xi | | |
| Cassiterite. (TIN-STONE) | | | |
| <i>See also</i> Tin. | | | |
| Columbite associated with..... | 236 vii | | |
| Determination of..... | 204, 210, 211 vi | | |
| Hardness and specific gravity of. | 202 vi | | |
| Vermilion mine, Sudbury.... | 190, 193 ii | | |
| | 36 iv | | |
| | 211 ix | | |
| | 162 C xiv | | |
| Wanapitei lake (near)..... | 211 ix | | |
| Casslor, J. H..... | 64 A xiii | | |
| Cast iron. | | | |
| <i>See also</i> Iron. | | | |
| For furnaces..... | 377 R C | | |
| Castile, ALGONA TP., RENFREW CO. | | | |
| Utica formation near..... | 104 B xiii | | |
| Castings and forgings. | | | |
| Canadian imports of, 1881-87.... | 250 R C | | |
| Use of charcoal in..... | 401, 402 R C | | |
| Castleton, CRAMAHE TP., NORTHUM- | | | |
| BERLAND CO..... | 231 A xiii | | |
| Castor oil bean. | | | |
| Moose Factory..... | 107 iv | | |
| river, NATION RIVER, OTTAWA | | | |
| RIVER. | | | |
| Limestone on..... | 108, 109 B xiii | | |
| Calciferous..... | 47 B xiii | | |
| Cat (WILD). | | | |
| Mattagami river..... | 131 A xv | | |
| Cat bird. | | | |
| Abitibi dist..... | 126 A xiii | | |
| Cat portage, MICHIPICOTEN RIVER, | | | |
| ALG. | | | |
| Description of..... | 190 vii | | |
| Catalan forge. | | | |
| Character of ore suited for..... | 477 R C | | |
| Notes on..... | 355, 356 R C | | |
| Smelting in..... | 476 R C | | |
| Catalogue of Minerals (IN THE BU- | | | |
| REAU'S COLLECTION). | | | |
| Notes on, by Goodwin..... | 206-229 vi | | |
| Catalonia prov., SPAIN. | | | |
| Mispickel in..... | 101 xi | | |
| Catalysis. | | | |
| Definition of..... | 63 x | | |
| Catarqui Mining and Develop- | | | |
| ment Co. | | | |
| Capital and date of charter..... | 9 x | | |
| Working St. Charles iron mine.. | 128 x | | |
| pt., NEAR KINGSTON. | | | |
| Limestone on, fossiliferous..... | 44 B xiii | | |
| Catterpillar, tent | | | |
| Abitibi dist..... | 128 A xiii | | |
| Garden River (near)..... | 123 viii | | |
| Cates, Henry Somerset | 87 x | | |
| Catfish creek, MAGPIE RIVER, L. SU- | | | |
| PERIOR. | | | |
| Agglomerates on..... | 342 A xiv | | |
| Minor ref. to..... | 293 A xiv | | |
| Notes on, by J. M. Bell..... | 286 A xiv | | |
| lake, CATFISH CREEK, MAGPIE | | | |
| RIVER, L. SUPERIOR. | | | |
| Agglomerate on..... | 342 A xiv | | |
| Description of Catfish creek near. | 286 A xiv | | |
| Rocks near..... | 348 A xiv | | |
| Cathcart pt. <i>See</i> McKellar pt. | | | |

| | Page. | Vol. | | Page. | Vol. |
|---|-------|--------|--|------------|--------|
| Catherinet, Jules | | | Cayuga tp., South, HALDIMAND CO. | | |
| Sperryllite found by, in B.C. | 162 | c xiv | Oriskany sandstone in, overlaid by coral layer. | 153 | xii |
| Catlett, Prof. Charles | | | <i>Cecidomyia strobiloides</i> . See Willow gall, pine cone | | |
| Platinum found by, in Sudbury ores | 283 | xii | Cedar. | | |
| Polydymite found by, in Sudbury ores | 281 | xii | Abitibi dist. | 193 | viii |
| described by. | 168 | xi | 197, 223, 230 A | xiv | |
| | 159 | c xiv | 125 A | xii | |
| Cattanach, A. J. | | | Eby tp. | 176, 178, | 179 xv |
| Evidence by, before R.C., re:— | | | For street paving. | 105 | iii |
| govt. aid for iron smelting. | 396 | R C | Fourth Meridian line. | 180 | vii |
| miners' rights. | 261 | R C | Frederick House Lake dist. | 108, 124 A | xiii |
| mining laws. | 315 | R C | Hudson Bay slope. | 176 | xi |
| need of railways. | 241 | R C | Lonely lake | 62 | v |
| Silver Islet mine. | 195 | R C | Mattagami valley | 129 | ix |
| technical education. | 428 | R C | 188, 189 A | xiv | |
| Managing Director, Jackfish Lake Mg. Co. | 77 | v | 118, 123, 127, 110, | 144 A | xv |
| | | | diameter | 141 A | xv |
| Cattle. | | | Michipicoten div. | 13 Bull | iii |
| Bedding for. | 121 | iv | 189, 206 | vii | |
| See also Moss-litter. | | | 137 | viii | |
| Moose Factory. | 107 | iv | 295 A | xiv | |
| Rainy Lake reg., owned by Indi- ans. | 97 | iv | 200 A | xv | |
| Cauchon, Joseph | 127 | vi | Batchawana bay. | 203 | viii |
| Caustic soda. See Alkali works. | | | valley. | 200 | viii |
| Caverhill, J. L. | | | Mamainse pen | 72 | iii |
| Gold mining by, near Wawa. | 194 | vii | Montreal river | 133 | viii |
| Caves. | | | Missinaibi river. | 139 | ix |
| Michipicoten island. | 143 | viii | Mississagi river | 161, 172 | xii |
| Caviar. | | | Moose River basin. | 176 A | xiii |
| Sturgeon roe for, from L. of the Woods. | 167 | v | Nipigon Lake dist. | 111 | iv |
| Cawes, French | | | 212 | x | |
| Rules by, for construction of con- crete floors. | 180 A | xiv | 138 A | xvi | |
| Cawley, Clark & Co. | 122 | xi | Niven's base line and S. of. | 141 | ix |
| Cawrse, J. W. | | | Porcupine Lake dist. | 176 | viii |
| Brick-yard of, London, Ont. | 80 B | xv | 105, 122, | 123 A | xiii |
| Cayea lake, McCANN TP., NIP. | 248 A | xiv | Rainy River dist. | 65 | R C |
| Cayuga, N. CAYUGA TP., HALDI- MAND CO. | | | Dominion lake. | 174 | vii |
| Cement quarry near. | 55, | 77 R C | Rainy Lake reg. | 95 | iv |
| Gypsum near. | 110 | i | river. | 117 | iv |
| notes | 119 | R C | 208 | v | |
| 52 B | xiii | | Sabawe lake. | 142 | v |
| mining near | 241 | i | Seine river | 151 | v |
| evidence before R.C. | 121 | R C | white | | |
| See also Paris gypsum mine, Excelsior gyp- sum mine and Teas- dale, T. | | | Abitibi region. | 126 A | xiii |
| Limestone quarries at, analysis. | 55 B | xiii | 216, | 240 A | xiv |
| Rocks between, and Hagersville. | 145 | x | Kenogami valley. | 112 | iv |
| lake, U.S. | | | Mattagami valley, diameter. | 137 A | xv |
| Iroquois beach on. | 233 A | xiii | Nipigon Lake dist. | 112 | iv |
| Lake Portland Cement Co. | 30 | xii | bird. | | |
| tp., North, HALDIMAND CO. | | | Abitibi dist. | 253 A | xiv |
| Gas well in, log of. | 105 A | xiv | island, L. OF THE WOODS. | | |
| Gypsum in. | 110 | i | Gold claims on | 96 | xii |
| See also Cayuga. | | | Island Gold Mg. Co. | | |
| Limestone in, analysis. | 146 | xii | Capital and date of charter. | 10 | viii |
| fossiliferous. | 118 B | xiii | Cornucopia mine worked by. | 54 | vii |
| quarries. | 55 B | xiii | 67 | viii | |
| Lower Helderberg formation in. | 53 B | xiii | lake, L. OF THE WOODS REG. | | |
| Oriskany formation in. | 153 | xii | Contact veins near | 117 | R C |
| Tufa in, calcareous. | 196 | ix | Country in vicinity of, notes. | 111 | vii |
| | | | Notes on, by Coleman. | 89 | vi |
| | | | narrows, PICKEREL LAKE, R. | | |
| | | | R. D. | | |
| | | | Laurentian gneiss on | 52 | v |
| | | | Celestine. | | |
| | | | Composition and uses of. | 530 | R C |

| | Page. | Vol. |
|---|----------------|------|
| Celestite. | | |
| Analysis of, and occurrences..... | 196 | ix |
| Description of..... | 222 | vi |
| Determination of..... | 205 | vi |
| Exhibited at World's Fair..... | 190 | ii |
| Kingston..... | 193 | ii |
| Cement. | | |
| <i>See also</i> Portland cement and Natural cement. | | |
| Analysis of a sample taken at random..... | 124 A | xiv |
| Appliances used in making..... | 125-132 A | xiv |
| As foundation for roads..... | 16 | iv |
| Blue lake, Dumfries tp..... | 33, 149 | xii |
| Canada, production, 1887..... | 213 | R C |
| 1888..... | 525 | R C |
| Classification of..... | 14 B | xiii |
| Compared with natural cement..... | 19 A | xvi |
| Definition of..... | 14 B | xiii |
| Demand for, increasing..... | 5 | xi |
| Effect of increased usage of, on quarrying..... | 14 A | xiii |
| Grand river..... | 16 A | xiv |
| Industry of, 1890, paper on..... | 108-110 | i |
| 1893, notes by Blue..... | 16, 17 | iv |
| 1899 " De Kalb..... | 108 | ix |
| Industry of, 1901, notes on..... | 30-34 | xi |
| 1902, "..... | 29-36 | xii |
| 1903, "..... | 17-19 B | xiii |
| 1904, paper by Gillespie..... | 118-183 A | xiv |
| 1906, notes on..... | 115-117 B | xv |
| Napanee, notes by Rathbun..... | 84, 85 | R C |
| tests on..... | 77 | R C |
| Notes on, by Cummings..... | 106, 107 | i |
| Plant for making, cost of..... | 125 A | xiv |
| new kind, 1900..... | 16 | x |
| Port Colborne, notes by Coleman on rock suitable for..... | 34 | xi |
| Statistics of, 1888..... | 72 | R C |
| 1891..... | 6 | i |
| 1892..... | 7, 11 | ii |
| 1893..... | 6, 10 | iii |
| 1894..... | 11-15 | iv |
| 1895..... | 11, 29 | v |
| 1896..... | 12, 16 | vi |
| 1897..... | 15, 16 | vii |
| 1898..... | 11, 13 | viii |
| 1899..... | 12, 13 | ix |
| 1900..... | 7, 11, 15 | x |
| 1901..... | 12, 13, 30 | xi |
| 1891-1901..... | 32 | xi |
| 1902..... | 12, 13, 29, 30 | xii |
| 1903..... | 3, 16, 18 A | xiii |
| 1904..... | 1, 3, 17, 18 A | xiv |
| 1905..... | 1, 4, 18 A | xv |
| 1906..... | 3-6 A | xvi |
| Testing of, paper by Gillespie..... | 166-170 A | xiv |
| Tests on..... | 182 A | xiv |
| Napanee..... | 77 | R C |
| United States, production, 1888..... | 525 | R C |
| Uses of, paper by Gillespie..... | 170-180 A | xiv |
| paint. | | |
| Composition of..... | 463 | R C |

| | Page. | Vol. |
|--|-----------------|------|
| Cement, Stone and Building Co. | | |
| Capital and date of charter..... | 24 A | xiv |
| Central Oil and Gas Co. | | |
| Capital and date of charter..... | 29 A | xvi |
| Central Ontario Granite and Marble Co. | | |
| Quarrying by, near Bancroft..... | 107 A | xv |
| Ontario Mining Co. | | |
| Capital and date of charter..... | 8 | vii |
| Ontario Railway. | | |
| Cost and purchase of..... | 59 | ii |
| Peat Co. | 9 | x |
| Centre lake, MICHIPICOTEN DIV., ALG. | | |
| Minor ref. to..... | 200 A | xv |
| Rocks on and near..... | 178, 202, 205 A | xv |
| Star Mg. Co. | | |
| Capital and date of charter..... | 9 | xii |
| Centreville, CAMDEN TP., ADDINGTON CO. | | |
| Contact, Laurentian-Silurian at..... | 27 B | xiii |
| Century Silver Mg. Co. | | |
| Capital and date of charter..... | 29 A | xvi |
| <i>Ceophleus pileatus.</i> <i>See</i> Woodpecker, pileated | | |
| <i>Cephalopoda.</i> | | |
| Kwataboahegan river..... | 188 A | xiii |
| Ceramics. | | |
| Taught at Ohio University..... | 17 | v |
| Cerargyrite (HORN SILVER). | | |
| Composition of..... | 453 | R C |
| Determination of..... | 208 | vi |
| Hardness of..... | 201 | vi |
| Joachimsthal, Bohemia..... | 61 B | xiv |
| Port Arthur dist..... | 55, 58 B | xiv |
| Silver islet..... | 196 | ix |
| Specific gravity of..... | 201 | vi |
| <i>Ceratophyllum demersum.</i> | | |
| Abitibi dist..... | 242 A | xiv |
| Cerium. | | |
| In allanite and columbite..... | 196 | ix |
| Lyndoch tp..... | 236 | vii |
| <i>Certhia familiaris americana.</i> <i>See</i> Creeper, brown | | |
| Cerussite (CARBONATE OF LEAD). | | |
| Definition of..... | 530 | R C |
| Determination of..... | 208 | vi |
| Hardness of..... | 202 | vi |
| Hints on, to prospectors..... | 460, 461 | R C |
| How to assay..... | 449 | R C |
| Specific gravity of..... | 202 | vi |
| <i>Cer. le aleyoni.</i> <i>See</i> Kingfisher, belted | | |
| Cess-pools. | | |
| Moss litter for..... | 143 | iii |
| Ceylon. | | |
| Corundum in, ref. to..... | 242 | viii |
| Mica from..... | 135 | x |
| Chahazite. | | |
| Apatite districts..... | 442 | R C |
| Monteagle tp..... | 196 | ix |
| Chabot, J. B. N. | 97 | x |
| Chaffey, B. E. | 55 | viii |
| G. and Bros. | | |
| Iron mining by, near Newboro.. | 34 | ii |
| iron mine, S. CROSBY TP., LEEDS CO. | | |
| Early mining in..... | 44, 45 | ii |
| Ore of, analysis..... | 54 | ii |
| tested with Wetherill separator..... | 337 | xii |

| | Page. | Vol. |
|--|------------|--------|
| Chaffey iron mine. — <i>Con.</i> | | |
| Ore of, titaniferous..... | 45, 49, 86 | ii |
| | 201 | ix |
| Rocks in..... | 54 | ii |
| Chains. | | |
| Canadian imports of, 1881-87..... | 246, 250 | R C |
| Chalanches, DAUPHINE, FRANCE. | | |
| Silver-Cobalt-nickel ores of :— | | |
| paper by Rickard..... | 63-67 | B xiv |
| unprofitable at depth..... | 6 | B xiv |
| Chalcanthite | | |
| Lake tp..... | 136 | ix |
| Chalcedony. | | |
| Annaberg, Saxony..... | 61 | B xiv |
| Apatite districts..... | 442 | R C |
| Bruce mines, north of..... | 72 | i |
| Description of..... | 530 | R C |
| | 224 | vi |
| Determination of..... | 205 | vi |
| Exhibited at World's Fair..... | 187 | ii |
| Lake Superior..... | 196 | ix |
| Goulais bay..... | 72 | i |
| Michipicoten island..... | 143, 144 | viii |
| White Beaver lake..... | 93 | i |
| | 196 | ix |
| Chalcocite. <i>See</i> Copper glance. | | |
| Chalcodite. | | |
| Madoc tp..... | 196 | ix |
| Chalcotrichite. | | |
| A variety of euprite..... | 212 | vi |
| Hardness and specific gravity of..... | 202 | vi |
| Chalk. | | |
| Elements of..... | 142 | iv |
| lake, REACH TP., ONTARIO CO. | | |
| Marl in, analysis..... | 90 | B xiii |
| "Challenger" H. M. S..... | 441 | R C |
| Challerton peat process. | 216 | ii |
| Chalmers, Dr. Robert | | |
| Ref. to report by, on moss-litter | | |
| in N. B..... | 199 | ii |
| Views of, <i>re</i> ancient sea-level, | | |
| eastern Canada..... | 223 | x |
| Views of, <i>re</i> stratified clays of | | |
| Timiskaming lake..... | 178 | ix |
| Chaloner, John | 49 | ix |
| Chalons, MARNE DEPT., FRANCE. | | |
| Technical high-school at..... | 494 | R C |
| Chalybeate springs. | | |
| <i>See also</i> Water. | | |
| James Bay basin..... | 156 | A xiii |
| Mattagami river..... | 154 | A xiii |
| Chalybite. <i>See</i> Siderite. | | |
| Chambers, William E. | | |
| Acknowledgments to..... | 40 | A xiv |
| Chambers-Ferland mine, COBALT. | | |
| Nip. <i>See</i> Nipissing Mines Co. | | |
| Chambly co., QUE. | | |
| Peat-bogs in..... | 197, 198 | ii |
| Chaminiss (OR SHANINIS) hill, PON- | | |
| TIAC CO., QUE. | | |
| Altitude of..... | 204 | A xvi |
| Description of, and nomenclature. | | |
| | 218, 219 | xi |
| Minor ref. to..... | 262 | A xiv |
| Shape of..... | 266 | A xiv |
| Champion gold mine. <i>See</i> Bad | | |
| gold mine. | | |
| Champlain, CHAMPLAIN CO., QUE. | | |
| Peat at..... | 198 | ii |

| | Page. | Vol. |
|---------------------------------------|---------------|---------|
| Champlain lake, QUE. AND U. S. | | |
| Rocks on..... | 11 | R C |
| Chandler, G. H. | 217 | i |
| Chandler iron mine, ELY, U. S. | | |
| Notes on, by Coleman..... | 152 | ix |
| Sellwood..... | 126 | R C |
| Royalties paid by..... | 13 | i |
| Sections of..... | 174 | xi |
| notes on..... | 175 | xi |
| Chandos tp., PETERBORO CO. | | |
| Chalcopyrite in..... | 196 | ix |
| Geology of, notes by Miller..... | 214 | viii |
| Gold in..... | 199 | ix |
| Iron ore from, exhibited at Chi- | | |
| cago..... | 82 | ii |
| Channing, J. Park | | |
| Ref. to work by, on prospecting | | |
| with diamond drill..... | 224 | v |
| Tennessee smelter built by..... | 183 | C xiv |
| Channonhouse, Dr. John | 47 | xii |
| Chapelle, B. | 48 | A xiii |
| Chapin, F. B. | 87, 102 | vii |
| Howard | | |
| Silver mining by, Coleman tp. ... | 86 | A xv |
| <i>See also</i> next ref. | | |
| and Thomas. | | |
| Owners, Savage silver mine, near | | |
| Cobalt..... | 52 | A xvi |
| Chapleau, ALG. | | |
| Canoe route from, to Winder- | | |
| mere lake..... | 201 | viii |
| Forest-fires at, and northward. | | |
| | 132, 141 | ix |
| Trap rock near..... | 106 | xii |
| Chaplin, William | 95 | xii |
| Chapman, Prof. E. J. | | |
| Analysis and assays by :— | | |
| gold ores, L. of the Woods..... | 64 | R C |
| iron ores, Atikokan range..... | 75 | ii |
| Hastings dist..... | 130-132 | R C |
| | 54 | ii |
| magnetites, various..... | 202 | ix |
| silver ores, Silver islet..... | 139 | vi |
| Anthraxolite described by..... | 5 | Bull ii |
| named by..... | 129, 160, 162 | vi |
| | 194 | ix |
| Asbestos defined by..... | 93 | iii |
| Geological nomenclature by..... | 4 | R C |
| Gold found by, Black bay..... | 114 | R C |
| Keweenaw | | |
| rock..... | 39 | iv |
| Notes by, on : | | |
| arenaceous rock, Hungerford | | |
| tp..... | 59 | B xiii |
| Belmont gold mine..... | 48, 49 | iii |
| Campbell-Blomfield claim..... | 104 | xi |
| iron ore, Atikokan range..... | 71 | ii |
| titaniferous..... | 233 | vii |
| marble, Madoc tp..... | 81 | R C |
| trap rocks, L. Superior..... | 15 | v |
| Surveys by, Ontario co., ref. to..... | 90 | B xiii |
| Views of, on formation of Iro- | | |
| quois beach..... | 225 | A xiii |
| Wolfram found by, near Orillia. | 233 | vii |
| | 212 | ix |
| John | 93 | viii |
| | 79 | ix |
| R. M. | 84 | ix |
| W. C. | 102 | vii |

| | Page. | Vol. |
|--|----------------|--------|
| Chapman, Dr. W. J. | 86 | ix |
| William | 200, 201 | iv |
| tp., P. S. D. | | |
| Limestone in..... | 94 | B xiii |
| Charcoal. | | |
| Analysis of..... | 166 | vi |
| As fuel for iron ores..... | 479-484 | R C |
| cost of, Kingston dist..... | 393 | R C |
| United States..... | 341 | R C |
| <i>See also</i> Charcoal iron. | | |
| Canada, production, 1886-87.... | 243 | R C |
| Deseronto, works for..... | 88 | R C |
| From mill refuse..... | 391 | R C |
| Grand Piles, Que., production... | 26 | ii |
| Kiln plants for..... | 23 | xii |
| Weight of..... | 394 | R C |
| iron. | | |
| <i>See also</i> Iron, Smelters, etc. | | |
| Cost of production, evidence by | | |
| Pusey..... | 388 | R C |
| Michigan, U.S., production, 1884- | | |
| 87..... | 227 | R C |
| Paper on, by Bawden..... | 468-486 | R C |
| Hardy..... | 328-345 | R C |
| Plant for, Sault Ste. Marie, notes | | |
| by Willmott..... | 99, 100 | xi |
| Prospect for making, in Ont. | | |
| (1890)..... | xxii | R C |
| Quality of, Ontario, superior.... | 215 | R C |
| Charente river, FRANCE. | | |
| Peat in valley of..... | 212 | ii |
| Charlebois, F. | 73 | xi |
| | 65 | xii |
| Charleboagh gold mine, KOOKAGA- | | |
| MING LAKE, NIP. | | |
| Notes on, 1898..... | 87 | vii |
| Charlemagne of France. | 95 | iii |
| Charles, J. H. | 102 | vii |
| J. L. | 102 | vii |
| Jones loc., MICHIPICOTEN IS- | | |
| LAND | 60 | R C |
| Charleston, W. VA. | | |
| Streets of, brick used in paving.. | 106 | iii |
| lake, LEEDS CO. | | |
| Hematite on..... | 140 | R C |
| Rensselaerite on, analysis..... | 208 | ix |
| Tonrualine on..... | 211 | ix |
| Charlesworth, L. C. | | |
| Report by, on Kenora Mg. Land | | |
| Agency:— | | |
| 1900..... | 145, 146 | x |
| 1901..... | 80, 81 | xi |
| 1902..... | 49 | xii |
| Work by, 1900..... | 7 | x |
| Charleton, A. G. | | |
| Notes by, nickel, New Caledonia | | |
| and Norway..... | 178, 179 | iv |
| Charlotte lake, MICHIPICOTEN DIV. | | |
| Iron formation on, notes by J. M. | | |
| Bell..... | 326 | A xiv |
| Rocks on and near..... | 305, 314, 338, | |
| 344, 348, 350, | 351 | A xiv |
| Charlotteville tp., NORFOLK CO. | | |
| Limonite in..... | 201 | ix |
| | 142 | xi |
| Smelter at, 1813..... | 319 | R C |
| | 13 | ii |
| Sulphur springs in..... | 210 | ix |
| analysis..... | 204 | ix |

| | Page. | Vol. |
|---|----------|--------|
| Charlton, B. E. | | |
| Evidence by, before R. C., <i>re</i> :— | | |
| large holdings..... | 310 | R C |
| tariffs..... | 232 | R C |
| technical education..... | 427 | R C |
| Vermilion gold mine..... | 113 | R C |
| ref. to..... | 143 | R C |
| President, Vermilion Gold Mg. Co. | 113 | R C |
| H. W. | | |
| Analysis by, of:— | | |
| analcite rock, Heron bay.... | 173 | viii |
| heronite, Heron bay..... | 189 | ix |
| John | | |
| Letter by (and others) as chair- | | |
| man of R. C..... | xi-xxiv | R C |
| Appointed on R. C..... | x | R C |
| W. A. | | |
| Report by, on country between | | |
| Dalton and Goulais river..... | 196-204 | viii |
| Charlton, NEAR TOMSTOWN, NIP. | 54 | A xvi |
| island, JAMES BAY. | | |
| H. B. C. post on..... | 178 | A xiii |
| Spruce on..... | 120 | iv |
| lake, NEAR MANITOU LAKE, R. | | |
| R. D. | 75 | viii |
| | 62 | ix |
| Charnokite. | | |
| Mount Thomas, Madras..... | 134 | A xv |
| Chartiers, NEAR PITTSBURG, U.S. | | |
| Steel industry at, statistics..... | 370 | R C |
| Iron and Steel Co. | | |
| Labour employed by, statistics .. | 370 | R C |
| Chase, A. S. | | |
| Notes by, on Little American gold | | |
| mine..... | 54 | iv |
| Charles P. | | |
| On vitrified brick..... | 108, 121 | iii |
| H. S. | | |
| Magnetic separator of, ref. to..... | 338, 339 | xii |
| Chateauguay iron mine. | | |
| Concentrating process at..... | 327 | xii |
| Chatham, KENT CO., ENGLAND. | | |
| Experiments at, on artificial ce- | | |
| ments..... | 118 | A xiv |
| Chatham, RALEIGH TP., KENT CO. | | |
| Brick-yards at, notes and photo.. | 72 | B xv |
| Country around, character..... | 102 | A xvi |
| Distance from, to Hamilton..... | 92 | A xvi |
| Erie clay near..... | 12 | B xv |
| Gas supply of..... | 98 | A xvi |
| notes by Coste..... | 99 | A xvi |
| Oil wells near, log of..... | 68 | B xiii |
| | 110, 111 | A xiv |
| Peat at, company formed to work | 24 | ix |
| Water supply of..... | 57 | i |
| sulphurous..... | 61 | i |
| Gas Co. | 98 | A xvi |
| Mineral Water Co. | 88 | xi |
| Oil Co. | | |
| Capital and date of charter..... | 8 | xii |
| tp., KENT CO. | | |
| Boring in, for coal..... | 45 | A xiii |
| <i>See also</i> Chatham. | | |
| Chatillon Commentry Co. | | |
| Armour plates of..... | 152, 155 | iii |
| Chats falls, OTTAWA RIVER. | | |
| Cambro-Silurian rocks near.... | 37, 38 | B xiii |

| | Page. | Vol. |
|--|--------------|------|
| Chaudiere falls, OTTAWA RIVER. | | |
| Power from, for Ottawa Carbide Co..... | 36 A | xi |
| river, QUE. | | |
| Gold on, discovery..... | 115 | R C |
| Chazy, CLINTON CO., N.Y. | | |
| Chazy formation named after.... | 41 | R C |
| Chazy formation (CAMBRO-SILURIAN). | | |
| Carleton co..... | 37 B | xiii |
| Nepean pt., analysis.... | 15 B | xiii |
| Distribution of..... | 41 | R C |
| Dundas co..... | 40 B | xiii |
| Chesterville (near)..... | 47 B | xiii |
| Glengarry co..... | 46, 47 B | xiii |
| Lanark co..... | 70 B | xiii |
| Ramsay tp..... | 78 B | xiii |
| Nipissing dist..... | 84 B | xiii |
| Position of, in Cambro-Silurian. | 2 | R C |
| Prescott co..... | 22 B | xiii |
| Renfrew co..... | 98 B | xiii |
| analysis..... | 104 B | xiii |
| Russell co..... | 105 B | xiii |
| Stormont co..... | 107 B | xiii |
| Thickness of, in oil fields..... | 110, 111 B | xiii |
| | 96 A | xiv |
| Cheapside Natural Gas and Oil Co. | | |
| Capital and date of charter..... | 29 A | xvi |
| Checkley, E. J. | | |
| Experiments by, on peat..... | 200 | xii |
| Cheeseworth, J. W. | | |
| | 94 | xii |
| | 61 A | xiii |
| Cheesman, Sam. | | |
| Brick-making by, Hamilton..... | 106 B | xv |
| Chelas, Charles | 55, | 57 |
| Chelmsford, BALFOUR TP., SUDBURY DIST. | | |
| Agricultural land near..... | 103 | iv |
| | 105, 106 C | xiv |
| Anticline near, photo..... | 98 C | xiv |
| Clay near..... | 241 | xii |
| | 104 C | xiv |
| Diabase dikes north of..... | 85 C | xiv |
| Pyrites deposits south of, notes by Fraleck..... | 180 A | xvi |
| Sandstone near..... | 86 | i |
| | 206 A | xiii |
| notes by Coleman, 10, | | |
| | 13, 96-100 C | xiv |
| petrography..... | 133, 134 C | xiv |
| quarries..... | 93 | i |
| | 207 A | xiii |
| Striae near, direction..... | 101 C | xiv |
| Zinc mining near..... | 32 | viii |
| See also Clark pyrites mine. | | |
| Creek, VERMILION RIVER, SUD. | | |
| Rocks near..... | 62 C | xiv |
| sandstone, quarried..... | 98 C | xiv |
| Chelona glabra. | | |
| Abitibi dist..... | 241 A | xiv |
| Mattagami valley..... | 151 A | xv |
| Chelsea hills, N. OF OTTAWA | | |
| Glaciation on..... | 30 B | xv |
| Cheltenham, MONTANA, U. S. | | |
| Paving clay from, analysis..... | 120 | iii |
| Chemnitz, SAXONY | 494 | R C |

| | Page. | Vol. |
|---|--------------|------|
| Chemung and Portage formation. | | |
| Description of..... | 42 | xii |
| Occurrences in Ont..... | 47 | R C |
| Position of, in Devonian..... | 2 | R C |
| Chener, P. | 41, | 48 |
| Cheney, F. A. See Cheney copper mine. | | |
| Cheney (OR GRANDE PORTAGE) cop=per mine, GOULD TP., ALG. | | |
| Closed, 1899..... | 96 | ix |
| Granodiorite near, petrography..... | 170 | viii |
| Greenstone near, petrography..... | 170 | xii |
| Notes on..... | 37, 148, 149 | viii |
| | 165 | xii |
| Photo of..... | 136, 137 | viii |
| Chenot process. | | |
| For iron smelting, unsuccessful..... | 486 | R C |
| Chepakonge river. See Sheshesh-kong river. | | |
| <i>Chermes abietis.</i> See Gall louse. | | |
| Cherokee co., TEXAS. | | |
| Iron ore in..... | 101 | ii |
| Cherret, E. | | |
| Brick-making by, Woodstock.... | 86 B | xv |
| Cherry, black | | |
| Blanche River dist..... | 180 | xii |
| Brulé lake, Th. B. d..... | 205 | v |
| choke | | |
| Lake of the Woods..... | 104 | vi |
| Ash rapid..... | 51 | v |
| Mattagami valley..... | 150 A | xv |
| Michipicoten div..... | 296 A | xiv |
| Batchawana river..... | 203 | viii |
| Moose River basin..... | 176 A | xiii |
| ground | | |
| Batchawana river..... | 203 | viii |
| wild red or bird | | |
| Abitibi dist..... | 126, 128 A | xiii |
| | 241 A | xiv |
| Mattagami valley..... | 150 A | xv |
| Michipicoten div..... | 296 A | xiv |
| Montreal river..... | 200 | viii |
| Moose River basin..... | 176 A | xiii |
| lake, Nip. | | |
| Description of..... | 110 A | xiii |
| Chert. See Hornstone. | | |
| Chesley tp., ALG. | | |
| Copper mining in. See Ransom mines. | | |
| Iron ore in..... | 188 | x |
| Chess, Cook & Co. | | |
| Labour employed by, statistics.. | 370 | R C |
| Chester, MASS. | | |
| Emery at..... | 213 | vii |
| Silver Mining Co. | | |
| Capital and date of charter..... | 25 A | xv |
| Chesterville, WINCHESTER TP., DUNDAS CO. | | |
| Limestone near..... | 40 B | xiii |
| Chazy..... | 47 B | xiii |
| Rise from, to Smiths Falls..... | 217 | x |
| gold claim, LARDER LAKE, NIP. | | |
| Camp of, photo..... | 217 A | xvi |
| Cobalt bloom in..... | 218 A | xvi |
| Free gold in..... | 215 A | xvi |
| Chew and Pratt. | | |
| Brick-yard of, Midland..... | 100 B | xv |

| | Page. | Vol. | | Page. | Vol. |
|---|--------------|--------|---|----------|--------|
| Chewett, J. H. | 103 | v | <i>Chionaspis.</i> See Louse, scurvy bark | | |
| | 76 | vi | Chipman, William Wirt | 87 | x |
| Chewing gum. | | | Chippmunk. | | |
| Made from petroleum..... | 155 | R C | Abitibi dist..... | 127 | A xiii |
| Chicago, U. S. | | | Chippawa, WILLOUGHBY TP., WEL- | | |
| Bessemer ore in, price of..... | 394 | R C | LAND CO. | | |
| Blast furnaces of..... | xx | R C | Clay near, character..... | 117 | B xiii |
| | 125, 127 | ii | Natural gas supplied to..... | 91 | A xiv |
| Brick pavements in..... | 108, 109 | iii | Consolidated Gold Mg. Co. | | |
| Exhibition at. See World's Fair. | | | Capital and date of charter..... | 8 | xii |
| Oil-bearing rock at, thickness.... | 94 | A xiv | Work by, 1902..... | 96 | xii |
| Steel industry of, notes on..... | 179 | C xiv | creek. See Welland creek. | | |
| Cobalt Silver Co. | | | Chippewa Gold Mg. Co. | | |
| Capital and date of charter..... | 31 | A xvi | Capital and date of charter..... | 8 | vii |
| Lumber Co. | | | Indians. | | |
| Prospecting by, Goulais River | | | Mississagi River dist..... | 172 | xii |
| valley..... | 197 | viii | river, L. SUPERIOR. See Har- | | |
| mine. See Inez mine. | | | mony river. | | |
| Wheel and Manufacturing | | | Chisholm, A. M. | | |
| Co. | 240 | viii | Actinolite mining by, Kaladar | | |
| Chickadee (TOM-TIT). | | | tp..... | 98 | vii |
| Abitibi dist..... | 126 | A xiii | Feldspar mining by, Bedford tp. | 83 | A xiv |
| Hudsonian | | | Gold mining by, Barrie tp. | 117 | x |
| Abitibi dist..... | 243 | A xiv | Manager, North American Stone | | |
| Chief Buffalo. | | | and Asbestos Co..... | 137 | iii |
| Summer residence of, photo. 176, | 177 | vi | Molybdenite mining by, Shef- | | |
| island, LAKE COUCHICHING. | | | field tp..... | 11 | A xiii |
| Wolfraimite on..... | 212 | ix | G. | 102 | vii |
| island, L. TIMISKAMING. | | | quarry, CREDIT FORKS. | | |
| Rocks on..... | 86 | B xiii | Evidence re, before R.C..... | 79 | R C |
| Chiefs pt., AMABEL TP., BRUCE CO. | | | Notes on, by Bell..... | 73 | R C |
| Limestone at..... | 36, | 37 | Chittenden, S. | 102 | vii |
| Niagara..... | 50 | B xiii | Chitty, A. H. | 115 | ix |
| Chien D'Or island, L. OF THE | | | | 140 | x |
| WOODS. | | | | 73 | xi |
| Gold prospecting on..... | 49 | vii | Chloanthite. | | |
| Chihuahua state, MEXICO. | | | Annaberg, Saxony..... | 61 | B xiv |
| Cobalt minerals in..... | 71 | B xiv | Cobalt dist..... | xi | A xiii |
| Child, W. A. | 15 | ix | | 12, | 13 |
| Children in mines. | 22 | iv | analysis..... | 98 | A xiii |
| Chills ? | | | | 19 | B xiv |
| Tin-salting by, Michipicoten dist. | 139 | viii | Hardness of..... | 202 | vi |
| Childs, Charles M. & Co. | 122 | xi | Joachimsthal, Bohemia..... | 61 | B xiv |
| H. L. & Co. | 118 | ii | Notes on, by Goodwin..... | 214 | vi |
| iron mine. | | | Specific gravity of..... | 202 | vi |
| See also Mineral Range Iron Mg. | | | Chlor=apatites. See Apatite. | | |
| Co. | | | Chlorastrolite. | | |
| Idle..... | 81, | 84 | Isle Royale, Michipicoten island. | 196 | ix |
| Photo..... | 96, 97, 224, | 225 | Chloride of lime. | 5 | B xiii |
| Chili. | | | "Chloriders." | | |
| Cobalt deposits in..... | 70-72 | B xiv | Definition of..... | 39 | i |
| Copper production of, 1857-77-87. | 371 | R C | Chlorides. | | |
| Nickel coinage in..... | 161 | ii | Test for..... | 449 | R C |
| <i>Chimaphila umbellata.</i> | | | Chlorination works. | | |
| Matagami valley..... | 151 | A xv | Gatling gold mine, Marmora tp. | | |
| Chin cape, BRUCE CO. | | | | 107, 108 | R C |
| Rocks at..... | 35, | 36 | Sultana gold mine..... | 95, 115, | 249 |
| river, ABITIBI RIVER. | | | | 277 | viii |
| Notes on, by Workman..... | 251 | 252 | photo..... | 160, 161 | v |
| China. | | | | 112, 113 | vi |
| Nickel in, ancient knowledge of. | 163 | c xiv | Chlorine. | | |
| clay. See Kaolin. | | | Proportion of, in earth's crust... | 447 | R C |
| Chinese. | | | Chlorite. | | |
| As labourers, New Caledonia..... | 149 | ii | Apatite districts..... | 442 | R C |
| Chinguacousy tp., PEEL CO. | | | Composition of..... | 227 | vi |
| Brick-clay in. See Terra cotta. | | | | 530 | R C |
| works in. See Brampton. | | | Determination of..... | 205 | vi |
| <i>Chionoxes serpyllifolia.</i> | | | Port Arthur silver veins..... | 58 | B xiv |
| Abitibi dist..... | 241 | A xiv | Wanapitei, enclosing gold nuggets. | 38 | iv |

| | Page. | Vol. | | Page. | Vol. |
|--|----------|------|--|----------|------|
| Chlorite schists. | | | Christie tp., P. S. D. | | |
| Edgeward island, L. Huron..... | 109 | R C | Copper prospecting in..... | 121 | x |
| Wabigoon Lake dist..... | 183 | vii | "Christophle." | | |
| Wanapitei lake, gold-bearing.... | 191 | ii | Manufacture of, notes on..... | 160 | ii |
| Choate, Wayne | | | Christopherson, L. A. (H. B. C.) | | |
| Lithographic stone quarry worked | | | Views of, on land east of Moose | | |
| by, Marmora tp..... | 138 | iii | River basin..... | 204 | v |
| Chokecherry. See Cherry, choke | | | Christy, Thomas | 31 | vii |
| Choeira. | | | Chromite (IRON CHROMATE). | | |
| Bruce mines, 1849..... | 94 | R C | Canada, production..... | 243 | R C |
| Chondrodite. | | | Determination of..... | 204 | vi |
| Leeds co..... | 194 | ii | and value..... | 215 | vi |
| Newboro..... | 196 | ix | Hints on, to prospectors..... | 461 | R C |
| Chonetes. | | | In non-titaniferous magnetites... | 196 | ix |
| Anderdon tp..... | 125, 126 | xi | In serpentine..... | 81 | i |
| Kwataboahegan river..... | 186 A | xiii | United States, production, 1888. | 525 | R C |
| St. Marys, near..... | 151, 152 | xii | | | |
| | 96 B | xiii | Chrysocola. | | |
| "antiopia. | | | Hardness of..... | 202 | vi |
| Kwataboahegan river..... | 186 A | xiii | Lake Superior..... | 196 | ix |
| "hemispherica. | | | Notes on, by Goodwin..... | 213 | vi |
| St. Marys (near)..... | 151, 152 | xii | Specific gravity of..... | 202 | vi |
| | 96 B | xiii | Chrysops. See Deer flies. | | |
| "lineata. | | | Chrysolite (OLIVINE). | | |
| Stony pt., L. Huron..... | 155 | xii | Definition of..... | 538 | R C |
| <i>Chonophyllum magnificum.</i> | | | Chrysotile. | | |
| Walpole tp..... | 143 | xii | See also Serpentine. | | |
| <i>Chordeiles popetue.</i> See Hawk, night | | | Analysis of average..... | 90 | iii |
| "virginianus. See Hawk, night | | | Elzevir tp..... | 97 | iii |
| Chown, George Y. | 178 | iii | Porcupine lake, Alg..... | 176 | vii |
| J. E. | | | Sold as asbestos..... | 90 | iii |
| Manager for Webster & Co..... | 135 | x | Church, B. | 243 | i |
| | 291 | xi | Church Missionary Society. | | |
| Canton mica mine..... | 195 | iii | See also Missions. | | |
| | 276 | v | James bay..... | 134 | iv |
| Grant mica mine..... | 278 | v | | 192 | viii |
| Sydenham mica mine..... | 192 | iii | Churchill, C. | 102 | viii |
| Mica mining by, S. Burgess tp.. | 98 | vii | Churchill. See Fort Churchill. | | |
| lake, COBALT DIST., NIP. | | | Chute, The, MAGPIE RIVER, L. SUPERIOR. | | |
| Huronian near..... | 40 B | xiv | Description of river near..... | 286 A | xiv |
| Minor ref. to..... | 35 B | xiv | <i>Cimber americana.</i> See Saw-fly, American | | |
| Choye cape, L. SUPERIOR. | | | Cincinnati, U. S. | | |
| Iron ore near..... | 314 | xii | Brick pavements in..... | 108, 113 | iii |
| | 179 A | xv | Natural gas in..... | 151 | R C |
| Rocks at and near..... | 201 | x | anticline. | | |
| | 189 A | xv | Course of..... | 42 | R C |
| Keweenawan formation.. | 204 | vii | | 116 | i |
| photo... 190 A | 190 A | xv | | 113 A | xv |
| quartzite, banded..... | 161 | ix | group. | | |
| Christensen stove. | | | Equal to Hudson River and | | |
| Diagram of; notes on..... | 227 | xii | Utica formations..... | 116 | i |
| Christiania, NORWAY. | | | Cinnabar. | | |
| Nepheline rocks of, ref. to..... | 208 | xi | See also Mercury. | | |
| Christie, D. D. See Christie, Henderson & Co. | | | Definition of..... | 530 | R C |
| Robert. | 138 | i | Determination of..... | 204 | vi |
| Thomas. | 32 | xii | Hardness of..... | 202 | vi |
| Henderson & Co. | 28 | xii | Hints on, to prospectors..... | 457 | R C |
| lake, S. SHERBROOKE TP., LANARK CO. | | | Notes on, by Goodwin..... | 211 | vi |
| Iron ore on..... | 44, 46, | ii | Saxony..... | 89 B | xiv |
| analysis..... | 48 | ii | Specific gravity of..... | 202 | vi |
| mining..... | 187 | R C | <i>Circus alpina.</i> | | |
| See also Watson iron mine. | | | Abitibi dist..... | 241 A | xiv |
| Limestone on..... | 46 | ii | Mattagami valley..... | 150 A | xv |
| siding, NASSAGAWAYA TP., HALTON CO. | | | Cirkel, F. | 37 | vi |
| Analysis of limestone from..... | 58 B | xiii | City of Cobalt Mg. Co. | | |
| | | | Capital and date of charter..... | 8 | vii |
| | | | Working in Fairbank tp..... | 141 | vii |

| | Page. | Vol. | | Page. | Vol. |
|---|----------|--------|-----------------------------------|----------|----------|
| Citizens' Natural Gas Co. | | | Clarendon tp.—<i>Con.</i> | | |
| Dunnville supplied by..... | 106 | A xiv | Iron ore in..... | 45, 61 | ii |
| Log of well of, Canborough tp..... | 105 | A xiv | exhibited at World's | | |
| Operating in Attercliffe field..... | 91 | A xiv | Fair..... | 79, 82 | ii |
| Cladopora. | | | hematite..... | 199 | ix |
| Hamilton..... | 141 | xii | Iron pyrites mining in..... | 164 | A xvi |
| <i>aspara.</i> | | | Mispickel in..... | 105 | xi |
| Anderdon tp..... | 125 | xi | <i>See also</i> Plevna. | | |
| <i>cryptodens.</i> | | | Rocks in, diorite..... | 200 | xi |
| Anderdon tp..... | 125 | xi | limestone..... | 186 | xi |
| Kwataboahagan river..... | 181 | A xiii | marble..... | 80 | R C |
| <i>labiosa.</i> | | | notes by Miller..... | 202, 203 | xi |
| Anderdon tp..... | 125 | xi | Steatite and talc in..... | 210 | ix |
| Hagersville..... | 145 | xii | Tremolite and vesuvianite in..... | 211 | ix |
| Villanova..... | 143 | xii | | | |
| Woodstock..... | 148 | xii | Clark, A. M. | | |
| Claims. See Mining claims. | | | Ferro-nickel made by..... | 165 | C xiv |
| Clapp, Mr. | | | C. H. | 88 | xi |
| Marble on land of, near Actinolite. | 82 | R C | D. | | |
| Mispickel..... | 102, 200 | xi | Gold mining by, Michipicoten | | |
| Clapperton island, L. HURON. | | | div..... | 102 | vii |
| Utica formation on..... | 42 | R C | ..... | 103 | viii |
| Clara tp., NIP. |  |  | ..... | 115 | ix |
| Trenton formation in. <i>See</i> Deux |  |  | ..... | 140 | x |
| Rivières. |  |  | ..... | 73 | xi |
| Clara Bell mine. See Clarabelle |  |  | ..... | 65 | xii |
| mines. | | | D. | 27, 88 | B xv |
| Clarabelle junction, SUDBURY DIST. | | | Donald | | |
| Greywacke near..... | 89 | C xiv | Gold mining by, Marmora tp..... | 263, 264 | v |
| lake, SUDBURY DIST. | | | F. S. | | |
| <i>See also</i> Clarabelle mines. | | | Oil operating in Kent co..... | 97 | A xvi |
| Dammed by Canadian Copper | | | H. | 102 | vii |
| Co..... | 41 | C xiv | Henry Clay | 75 | ix |
| Rocks on and near..... | 40, 41 | C xiv | J. M. | | |
| nickel-bearing..... | 256 | xii | Anthraxolite on land of..... | 3 | Bull. ii |
| mines, NEAR COPPER CLIFF, |  |  | ..... | 159 | vi |
| SUDBURY DIST. | | | Gold prospecting by, Fairbank | | |
| Actinolite in..... | 163 | C xiv | tp..... | 225 | i |
| Magnetite in..... | 281 | xii | Govt. drill lent to..... | 58 | xi |
| ..... | 40, 162 | C xiv | ..... | 50 | xii |
| Notes on, 1899..... | 97 | ix | ..... | 42 | A xiii |
| 1901..... | 122 | x | S. | 140 | x |
| 1901..... | 278, 279 | xi | W. B. | 84 | A xv |
| 1902, idle..... | 120 | xii | Hon. William Mortimer | | |
| Photos of..... | 288, 289 | xii | Transmittal letter to, 1902..... | 1 | xii |
| Rocks in and near..... | 257, 293 | xii | 1903..... | ix | A xiii |
| norite..... | 249 | xii | 1904..... | xv | A xiv |
| Clare co., IRELAND. | 202 | i | 1905..... | vii | A xv |
| Clare river, ADDINGTON CO. | | | 1906..... | 1 | A xvi |
| Contact, Laurentian-Silurian, on. | 27 | B xiii | William & Co. | | |
| Claremont, NEW HAMPSHIRE. | | | Iron output of, 1893..... | 119 | ii |
| Diamond drills made at..... | 169 | iv | Labour employed by, statistics.. | 370 | R C |
| Clarence tp., RUSSELL CO. | | | Clark, MONTANA. | | |
| Peat in..... | 190 | i | Wire rope tramway to, from | | |
| Rocks in, Chazy formation..... | 197 | ii | Granite..... | 352 | R C |
| Trenton..... | 98 | B xiii | pyrites mine, NEAR CHELMS- | | |
| Clarendon, OSO TP., FRONTENAC CO. | | | FORD, NIP. | | |
| Iron mining near. <i>See</i> Lizzie | | | Gossan from, analysis..... | 186 | A xvi |
| iron mine. | | | Notes on, by Fraleck..... | 180 | A xvi |
| Clarendon Mining Co. | | | Clarke, C. G. | 102 | vii |
| Capital and date of charter..... | 9 | x | Dr. C. W. | 252 | xi |
| tp., FRONTENAC CO. | | | F. | 138 | xii |
| Actinolite in..... | 192 | ix | —, (H.B.C.)..... | 172 | ii |
| Field prospecting in..... | 213, 218 | v | Prof. F. W. | | |
| Gold in..... | 199 | ix | Analysis by, of iron ore, Helen | | |
| mining. <i>See</i> Boerth g.m. | | | mine..... | 170 | xi |
| | | | Platinum found by, Sudbury ores. | 283 | xii |
| | | | Polydymite..... | 168 | ii |
|  |  |  | ..... | 281 | xii |

| | Page. | Vol. |
|---|-------------|--------|
| Clarke, Gordon | 26, 27 | viii |
| Prof. John M. | 3, 182, 190 | A xiii |
| Thomas E. <i>See</i> Thomas E. Clarke Co. | | |
| tp., DURHAM CO. | | |
| Beach in. <i>See</i> Port Granby. | | |
| Limestone boulders in..... | 40 | B xiii |
| Silurian in. <i>See</i> Newcastle. | | |
| Clark's Standard Development Co. | | |
| Capital and date of charter..... | 29 | A xvi |
| Clarksburg, COLLINGWOOD TP., GREY CO. | | |
| Terrace near, altitude..... | 177 | ix |
| <i>Clathrodictyon lucum.</i> | | |
| Kawataboahegan river..... | 183 | A xiii |
| Lake Superior, north shore..... | 156 | viii |
| <i>" problematicum.</i> | | |
| Kwataboahegan river..... | 181 | A xiii |
| photo..... | 192, 193 | A xiii |
| Claude, -? | 29 | vi |
| Claudet, Joseph | 22 | xi |
| Clausthal, GERMANY. | | |
| Mining school at..... | 513 | R C |
| Clawson, George | 137 | iii |
| Clay. | | |
| <i>See also</i> Agricultural land, Brick-clay, etc. | | |
| Alumina in..... | 528 | R C |
| Analyses of, for cement..... | 124, 183 | A xiv |
| As evidence of ancient sea-level..... | 223 | x |
| Classification of..... | 5 | B xv |
| Composition of..... | 123 | A xiv |
| Crushing tests on..... | 37, 38 | B xv |
| Education of workers in..... | 17 | v |
| For paving-bricks, notes by Gibson and Orton..... | 114-118 | iii |
| Haileybury (near), analyses, notes and photo..... | 32, 33 | B xiv |
| Industry of, rep. by Baker, 1906..... | 56-120 | B xv |
| Localities supplying cement works..... | 133-162 | A xiv |
| Manufacture of products of..... | 41-56 | B xv |
| Marlbank, for cement..... | 109 | ix |
| Medway, The, England..... | 118 | A xiv |
| Notes on..... | 123 | A xiv |
| by Gibson..... | 124-132 | iii |
| Plasticity of, notes by Ries..... | 34 | B xv |
| Physical properties of..... | 122, 123 | iii |
| ..... | 34-40 | B xv |
| Rainy river..... | 100 | B xiii |
| Report on, by Baker, 1906..... | 1-40 | E xv |
| Shrinkage in, photo showing..... | 119 | B xv |
| Thurlow tp., analysis..... | 34 | xii |
| belt, The great | | |
| Location and area of..... | 32, 33 | B xiv |
| boulder | | |
| Abitibi river, lignite in..... | 188 | viii |
| photo..... | 200, 201 | vii |
| Definition of..... | 529, 544 | R C |
| Description of, by Geikie..... | 105 | i |
| Erosion of, in L. Superior..... | 156 | viii |
| Helen iron mine..... | 185 | xi |
| James bay, south of..... | 69 | R C |
| Lac du Bonnet, Man., analysis..... | 92 | B xv |
| Milton, photo..... | 7, 9 | B xv |
| Moose river..... | 191, 194 | viii |
| Notes on, by Baker..... | 10 | B xv |
| Bell..... | 49 | R C |

Clay, boulder—Con.

| | | |
|----------------------------------|--------|------|
| Ottawa, notes by Ami..... | 30, 31 | B xv |
| Thedford, photo..... | 11 | B xv |
| York tp., notes on hardness..... | 105 | i |

briquettes.

| | | |
|--|-------|------|
| Tensile strength of, tests by Baker..... | 35-38 | B xv |
|--|-------|------|

China *See* Kaolin.**Erie** *See* Erie clay.**ironstone.**

| | | |
|----------------------|-----|-----|
| Description..... | 530 | R C |
| Mattagami river..... | 47 | R C |

Lacustrine

| | | |
|-------------------------------|-------|------|
| Classification of..... | 52 | ii |
| Classfication of..... | 6 | B xv |
| Notes on, by M. B. Baker..... | 27-29 | B xv |

Leda *See* Leda clay.**Red-top** *See* Red-top clay.**Saugeen** *See* Saugeen clay.**slates.**

| | | |
|------------------------------|--------|---|
| Huronian areas..... | 72, 73 | i |
| falls, ABITIBI RIVER. | | |

| | | |
|-------------------------|-----|------|
| Notes on, by Parks..... | 184 | viii |
|-------------------------|-----|------|

| | | |
|----------------------------------|----|----|
| Claypool, George H. | 71 | ix |
|----------------------------------|----|----|

Clayton, Prof.

| | | |
|-------------------------------|----------|-----|
| Hints by, to prospectors..... | 463, 464 | R C |
| Son & Howlett. | | |

| | | |
|-----------------------------|-----|---|
| Peat-drying process of..... | 195 | i |
|-----------------------------|-----|---|

Clayton, JEFFERSON CO., N. Y.

| | | |
|-----------------------------|-----|--------|
| Morainic hills west of..... | 242 | A xiii |
| Stratified clays near..... | 243 | A xiii |

Clear lake, CAPREOL TP., NIP.

| | | |
|-----------------------------------|-----|--------|
| Gossan on..... | 74 | C xiv |
| Nickel near, prospecting for..... | 203 | A xiii |

| | | |
|--|-----|--------|
| Shape of, conforms to strike of rocks..... | 200 | A xiii |
| ..... | 73 | C xiv |

lake, DUMMER TP., PETERBORO' CO.

| | | |
|-----------------------------|----|--------|
| Escarpsments on..... | 97 | B xiii |
| Limestone on, analysis..... | 93 | B xiii |

lake, HUTTON AND WISNER TPS., NIP.

| | | |
|------------------------------|-----|--------|
| Huronian sediments near..... | 127 | C xiv |
| Iron ore near..... | 220 | A xiii |

| | | |
|--|----------|---|
| compared with ores N. of Batchawana bay..... | 190 | x |
| mining..... | 177, 178 | x |
| notes by Coleman..... | 185, 186 | x |

| | | |
|--|-----|-----|
| Norite near, petrographical notes..... | 295 | xii |
| Quartzite south of..... | 205 | x |

lake, WINDIGOKAN LAKE, TH. B. D.

| | | |
|---------------------------|-----|-------|
| Arkose rocks west of..... | 146 | A xvi |
| Minor ref. to..... | 138 | A xvi |

| | | |
|------------------------------------|-----|-------|
| Sand plain near..... | 148 | A xvi |
| lake, NORTHWEST OF SUDBURY. | 149 | vii |

lake, SEBASTOPOL TP., REN-FREW CO.

| | | |
|-----------------------|-----|-----|
| Apatite veins on..... | 439 | R C |
| ..... | 194 | ix |
| with hornblende..... | 441 | R C |

| | | |
|-------------------------|-----|--------|
| Calcite on..... | 195 | ix |
| Cambro-Silurian on..... | 104 | B xiii |

| | | |
|------------------------|-----|-------|
| Corundum near..... | 224 | vii |
| Keewatin rocks on..... | 44 | B xiv |

| | | |
|------------------------------|-----|-----|
| Minor refs. to..... | 220 | vii |
| Nepheline boulders near..... | 224 | vii |

| | | |
|----------------------------|-----|----|
| Pyroxene on island in..... | 207 | ix |
| Titanite..... | 211 | ix |

| | Page. | Vol. |
|--|----------|-------|
| Clear lake, TIMISKAMING REG., NIP. | | |
| Keewatin rocks near..... | 44 | B xiv |
| river, L. OF THE WOODS, R.R. D. | | |
| Argyll gold mine on..... | 65 | R c |
| Clearville, OXFORD TP., KENT CO. | | |
| Gas well at, log of..... | 109 | A xiv |
| Clearwater bay, L. OF THE WOODS, R. R. D. | | |
| Gold mining on..... | 118 | R c |
| See also Three Friends mine. | | |
| Three Ladies mine. | | |
| creek, CLEARWATER LAKE, SEINE RIVER DIST. | | |
| Water of; rocks of..... | 77 | vi |
| Waterpower on..... | 90 | viii |
| | 78 | ix |
| Gold Mg. Co. | 67 | vii |
| | 10, 91 | viii |
| See also Big Six mine. | | |
| lake, BEAVER LAKE, MISSISSAGI RIVER, ALG. | | |
| Country near, notes by Gratton.. | 161 | xii |
| lake, IRON CREEK, MICHIPICOTEN DIV., ALG. | | |
| Minor refs. to..... | 291, 293 | A xiv |
| Notes on, by J. M. Bell..... | 287, 288 | A xiv |
| Rocks near..... | 313, 321 | A xiv |
| lake, NEAR FREDERICK HOUSE LAKE, NIP. | | |
| | 177 | viii |
| lake, R.R.D. See Teggan lake. | | |
| lake, SEINE RIVER DIST., R.R.D. | | |
| Dam on..... | 104 | x |
| Gold mining near..... | 67 | vii |
| | 81 | ix |
| See also Big Six g. m. and Hammond Reef g. m. | | |
| Notes on, by Coleman..... | 131 | vii |
| Cleary, Thomas | 54, 57 | xi |
| <i>Clematis verticillaris.</i> | | |
| Mattagami valley..... | 150 | A xv |
| Clemens, Thomas | | |
| Notes by, on Bonanza gold mine. | 233 | iv |
| Clement lake, MATTAGAMI VALLEY, ALG. | | |
| Discovery of; dimensions of; rocks on..... | 124 | A xv |
| Granite near, pegmatitic..... | 134 | A xv |
| Soil east of, character..... | 152 | A xv |
| Timber on..... | 144 | A xv |
| Clements, J. Morgan | 195 | xi |
| | 301 | A xiv |
| Clemow, Francis Cockburn. | 60 | ix |
| T..... | 76 | xii |
| "Cleopatra."..... | 203 | v |
| Clergue, B. J. | 143 | ix |
| | 65 | xii |
| C. | | |
| Iron mining by, Michipicoten div..... | 103 | xii |
| E. V. | | |
| Acknowledgments to..... | 143 | ix |
| | 62, 67 | xi |
| Mining by, Michipicoten div. | | |
| licence..... | 103 | viii |
| | 66 | xii |
| manager Helen m..... | 138 | x |
| owner (part) "..... | 113 | ix |
| Statement by, re extent of Michipicoten range..... | 195 | x |

Clergue, E. V.—Con.

| | Page. | Vol. |
|--|-------|------|
| Work by, for Lake Superior Power Co..... | 92 | xi |
| F. H. | | |
| Acknowledgments to..... | 143, | ix |
| | 68 | x |
| | 67 | xi |
| Director, Algoma Steel Co. | 98 | xi |
| | 273 | xii |
| Iron mining by, Michipicoten div.. 254, 255, | 257 | viii |
| licence..... | 103 | viii |
| | 115 | ix |
| Manager, Consolidated Lake Superior Co..... | 92 | xi |
| Owner (part), Helen iron mine.. | 126 | x |
| power plant at Sault Ste. Marie..... | 61 | x |
| | 91 | xi |

Clergue family, The

| | | |
|---|-----|--------|
| Acknowledgments to..... | 181 | x |
| | 128 | xi |
| Failure of mines of, ref. to..... | 11 | A xiii |
| Iron prospecting by:— | | |
| Nipigon Lake dist..... | 311 | xii |
| Rainy River dist..... | 129 | xi |
| Magnetic surveying for, Sudbury dist..... | 289 | xii |
| Mining by, Michipicoten div.:— | | |
| failure of claims, ref. to . | xi | A xiii |
| licence..... | 115 | ix |
| | 140 | x |
| | 73 | xi |
| Nickel mine owned by..... | 154 | ix |

Cleveite.

| | | |
|-----------------------------------|----------|-------|
| Norway..... | 217 | vi |
| Cleveland, OHIO. | | |
| See also Standard Tool Co. | | |
| Brick pavements in..... | 108 | iii |
| Coal in, cost of (1890)..... | 232 | R c |
| Iron in, blast furnaces for..... | xx | R c |
| cost of production.. | 337, 392 | R c |
| Nickel refinery at..... | 131 | ii |
| Road metal for, from Bruce Mines. | | |
| | 13, 14 | v |
| | 125, 169 | viii |
| Sulphuric acid works at..... | 184 | A xvi |

Cleveland, YORKSHIRE, ENG.

| | | |
|------------------------------------|-----|-------|
| Iron ores of, character..... | 483 | R c |
| Cobalt Silver Mines. | | |
| Capital and date of charter..... | 29 | A xvi |
| iron mine, ISHPEMING, MICH. | | |
| Drilling at, cost of..... | 232 | v |
| Michipicoten Mg. Co. | | |
| Capital and date of charter..... | 25 | A xv |
| Mining Co. | | |
| Capital and date of charter..... | 7 | vii |
| Pearce gold mine worked by.... | 76 | A xiv |
| Rolling Mills Co. | | |
| Flange steel made by, notes on .. | 190 | iv |
| Stobie iron mine worked by.... | 249 | iv |
| Tests by, on nickel-steel..... | 145 | ii |

Cliff island, LAKE OF THE WOODS, R. R. D.

| | | |
|-------------------------------|-------------------|--------|
| | 119 | vii |
| Climate. | | |
| Abitibi dist..... | 188 | xii |
| | 116 | A xiii |
| | 207, 236-239, 253 | A xiv |
| Hinterland, The, notes on.... | 106, 107 | iv |

| | Page. | Vol. | | Page. | Vol. |
|---|------------|------|--|----------|------|
| Climax gold mine. — <i>Con.</i> | | | <i>Clintonia borealis.</i> | | |
| Lac Seul..... | 113 | vi | Abitibi dist..... | 241 A | xiv |
| Lake of the Woods region..... | 52 | vi | Mattagami valley..... | 150 A | xv |
| Lake Ontario, in Iroquois times..... | 237 A | xiii | "Clipper" ss. | 61 | xi |
| Lake Superior, north shore..... | 85 | v | <i>Clisiophyllum oneidanense.</i> | | |
| | 112 | vi | Port Colborne, near..... | 35 | xi |
| | 147 | viii | Close Brick Co. | | |
| Mattagami valley..... | 127, 147 A | xv | Brick-works of, Stratford, notes | | |
| Michipicoten div..... | 139 | viii | and photos..... | 92, 93 B | xv |
| | 297 A | xiv | Clothier, A. | | |
| Moose River basin..... | 174, 175 A | xiii | Brick-yard of, Kemptville, notes..... | 65 B | xv |
| Night-hawk lak..... | 184 | vi | Cloud bay, L. SUPERIOR. | | |
| Rainy Lake dist..... | 72 | iv | Copper mine on, notes by Cole- | | |
| Timagimi Lake region..... | 58 | R C | man..... | 148, 149 | ix |
| Climax gold mine, BIG-STONE BAY, | | | Country to west of, notes..... | 146 | ix |
| L. OF THE WOODS. | | | Rocks on, petrography..... | 179 | ix |
| Notes on, 1892..... | 233 | ii | Cloud creek, L. SUPERIOR. | | |
| 1898..... | 55 | viii | Beaches near..... | 175 | ix |
| Gold Mine Co. | | | Farm lands along..... | 146 | ix |
| Capital and date of charter..... | 8, 55 | viii | lake, CROOKS TP., TH.B.D. | | |
| silver mine. See Keystone | | | Copper locations on, notes by | | |
| silver mine. | | | Coleman..... | 146 | ix |
| Cline, James A. | 32 | xii | Cloudburst. | | |
| | 17 B | xiii | Sudbury, damage caused by..... | 273 | vi |
| Clinochlore. | | | Clouded Sulphur (BUTTERFLY). | | |
| Bagot tp., analysis..... | 196 | ix | Abitibi dist..... | 129 A | xiii |
| Clinton, GODERICH TP., HURON CO. | | | Clover. | | |
| Onondaga formation at..... | 45 | R C | Mamainse harbour..... | 129 | viii |
| Salt at, boring for..... | 185 | R C | Pigeon River dist..... | 147 | ix |
| evidence before R. C..... | 189 | R C | Rainy Lake dist..... | 165 | v |
| works..... | 22 A | xiii | Wanapitei Lake dist..... | 137 | vii |
| | 20 A | xiv | red | | |
| | 23 A | xvi | Michipicoten div..... | 13 Bull. | iii |
| Sulphur at..... | 194 | ii | | 206 | vii |
| Clinton, CLINTON CO., IOWA. | | | Leaf Mg. Co. | | |
| Brick pavements of..... | 113 | iii | Capital and date of charter..... | 5 | xii |
| Paving clay from, analysis..... | 120 | iii | Cloyne, ANGLESEA TP., ADDINGTON | | |
| co., N.Y. | | | co. | | |
| Clinton formation named after.. | 43 | R C | Rocks near, notes by Miller..... | 200-202 | xi |
| formation. | | | Clute, R. C. | | |
| Bruce co..... | 35, 36 B | xiii | Evidence by, before R.C..... | 133, 233 | R C |
| Description of..... | 24 B | xiii | and Brown. | 78, 79 | ii |
| Distribution and character..... | 43 | R C | Clydach, WALES. | | |
| Dufferin co..... | 39 B | xiii | Nickel refinery at..... | 287 | xii |
| Essex co., Kingsville..... | 118 | i | | 11 A | xv |
| Gas borings in, various..... | 129-138 | i | Sudbury ore sent to..... | 143 C | xiv |
| | | | | 15 A | xvi |
| Grey co..... | 48 B | xiii | Clyde avenue, HAMILTON. | | |
| Haldimand co., Caledonia..... | 252 | iv | Boring at, for gas and oil..... | 112 A | xv |
| Halton co..... | 57, 58 B | xiii | Clymo, C. | | |
| Lincoln co..... | 73 B | xiii | Evidence by, before R.C..... | 141, 146 | R C |
| Manitoulin island..... | 78 B | xiii | Clytie bay, SHOAL LAKE, L. OF THE | | |
| Nipissing dist..... | 84 B | xiii | WOODS. | | |
| Timiskaming lake..... | 83 B | xiii | Gold mining on, 1902..... | 94 | xii |
| Oil in..... | 23 A | xvi | 1903..... | 61, 62 A | xii |
| Ohio, gas in..... | 98 A | xiv | See also Gold Reefs No. 2 Mine. | | |
| Peel co..... | 95 B | xiii | Minor ref. to..... | 105 | vi |
| Position of, in Silurian..... | 2 | R C | <i>Cnicus arvensis.</i> | | |
| St. Joseph island..... | 179 B | xiii | Abitibi dist..... | 242 A | xiv |
| Simcoe co..... | 109 B | xiii | " muticus. | | |
| Thickness of, in oil fields..... | 96 A | xiv | Mattagami valley..... | 151 A | xv |
| Welland co., gas in..... | 98 A | xiii | Coal. | | |
| Wellington co..... | 120 B | xiv | See also Lignite. | | |
| Wentworth co..... | 123 B | xiii | Albany river (?), bituminous.... | 125 | iv |
| Steel Mill, PITTSBURG. | | | Analyses of..... | 184 | i |
| Labour employed by, statistics.. | 370 | R C | | 194 | xii |
| Output of, 1893..... | 119 | ii | bituminous..... | 166 | vi |
| tp., LINCOLN CO. | | | various..... | 175 A | xiii |
| Lead in, attempt to mine..... | 73 B | xiii | Balfour tp. See Anthraxolite. | | |
| Limestone in..... | 73, 74 B | xiii | | | |

| | Page. | Vol. |
|------------------------------------|------------|------|
| Coal.—<i>Con.</i> | | |
| British Columbia:— | | |
| competing with Nova Scotia... | 196 | ii |
| ownership of land carrying.... | 43 | i |
| Calorific power of | 480 | R C |
| | 207 | ii |
| | 166 | vi |
| Canada, exports, 1881-1887...243, | 244 | R C |
| imports from U.S., 1887... | 468 | R C |
| production, 1870, 1880.. | 209 | R C |
| 1886..... | 243 | R C |
| 1887-209, 213, 243 | | R C |
| 1888 | 525 | R C |
| Compared with peat..... | 184 | i |
| | 193 | xii |
| Composition of | 164 | vi |
| Definition of | 530 | R C |
| Dufferin co., boring for..... | 43, 45 A | xiii |
| Great Britain:— | | |
| accidents in mining..... | 199 | iv |
| royalties on..... | 15-38 | i |
| useless search for, prevented | | |
| by Geological Survey..... | 409 | R C |
| Hudson Bay slope..... | 57 | R C |
| notes by Gibson..... | xii A | xiii |
| <i>See also below, Moose river</i> | | |
| <i>and tribs.</i> | | |
| Labrador, Long island (? anthrax- | | |
| olite) | 126 | iv |
| Labuan..... | 43 | i |
| Lake of the Woods..... | 52 | R C |
| Located by prospectors in Silu- | | |
| rian | 203 | ii |
| Missinaibi (near), wrongfully re- | | |
| ported..... | 136, 146 | vii |
| Moose river and tribs. (lig.).. | 178, 181 | i |
| | 203 | ii |
| | 201 | ix |
| Abitibi valley..... | 70 | R C |
| | 203 | ii |
| | 188, 193 | viii |
| | 138, 159 A | xiii |
| photos..... | 200, 201 | viii |
| Mattagami river..... | 70 | R C |
| Missinaibi river..... | 52, 70 | R C |
| | 188, 194 | viii |
| | 136 A | xiii |
| notes by Gibson.. | 124, 125 | iv |
| Soweska river, map .. | 163 A | xiii |
| photos.. | 160, 161 A | xiii |
| section..... | 167 A | xiii |
| Wabiskagami river .. | 143 A | xiii |
| report by J. M. Bell.. | 161-174 A | xiii |
| New Brunswick, thickness of | | |
| seams | 196 | ii |
| New South Wales, royalty on... | 24 | i |
| Notes by Goodwin, on bitumin- | | |
| ous..... | 219 | vi |
| Nova Scotia | 196 | ii |
| Pictou field, output... 398 | | R C |
| Ontario, absence of..... | 180 | i |
| distribution in northern.. | 125 | iv |
| imports, 1865-9..... | 140 | iv |
| 1893-4 | 140 | iv |
| 1890-91..... | 281 | i |
| 1900..... | 192 | xii |
| Rainy lake.... | 64 | R C |
| Rainy river | 52 | R C |
| Tasmania, royalty on | 45 | i |

| | Page. | Vol. |
|---|------------|------|
| Coal.—<i>Con.</i> | | |
| Tourmaline mistaken for..... | 172 | ix |
| United States:— | | |
| Cleveland, cost of | 232 | R C |
| exports to Canada, 1887..... | 468 | R C |
| Ohio, calorific power | 207 | ii |
| Pennsylvania, anthracite.... | 233 | xii |
| Reynoldsville | 21 | x |
| calorific power... 207 | | ii |
| production, 1887..... | 213 | R C |
| 1888..... | 525 | R C |
| royalty on..... | 40, 41 | i |
| Victoria, Australia..... | 233 | v |
| Wallaceburg, near, boring for.. | 44, 45 A | xiii |
| <i>brook, MISSINAIBI RIVER, ALG.</i> | | |
| Coal near | 124 | iv |
| exploring for..... | 135, 161 A | xiii |
| Description of main river near... | 194 | viii |
| Coal Banks, ALTA. <i>See</i> Lethbridge. | | |
| Coalbrookdale, ENGLAND. | | |
| Iron smelting at..... | 357 | R C |
| Coast range, B. C. | | |
| Eruptive contacts in..... | 160 | vii |
| Coate, P. S..... | 99 A | xvi |
| Coatsworth, Joshua | | |
| Copper prospecting by, Mamainse | | |
| pt..... | 130 | ii |
| Section by, of rocks from Sand | | |
| bay, eastward..... | 79 | iii |
| Coatsworth, ROMNEY TP., KENT CO. | | |
| | 95, 100 A | xvi |
| Cobalt. | | |
| Arsenic from ores of..... | 23 A | xv |
| As an alloy of nickel..... | 159 | ii |
| Chili | 71, 72 B | xiv |
| Cobalt (Ont.) dist..... | 8, 9 A | xiv |
| report by Miller.. | 96-103 A | xiii |
| <i>See also</i> Appendix to this Index. | | |
| Foley tp..... | 93 | vii |
| For electric batteries..... | 11 A | xv |
| France..... | 63-67 B | xiv |
| Germany and Austria..... | 61-63 B | xiv |
| Schand | 146 C | xiv |
| Saxony, history of in- | | |
| dustry | 74-90 B | xiv |
| Hints on, to prospectors... 458 | | R C |
| L'Assomption river, Que..... | 443 | R C |
| Markets for..... | 103 A | xiii |
| Metallurgy of..... | 73 B | xiv |
| Mexico | 71 B | xiv |
| Montreal River div., Anvil lake. | | |
| | 45, 56 A | xvi |
| James tp.. | 45 A | xvi |
| Name of, meaning..... | 10 B | xiv |
| New Caledonia..... | 149 | ii |
| | 9 A | xiv |
| | 68-70 B | xiv |
| New South Wales..... | 70 B | xiv |
| Norway..... | 67 B | xiv |
| Occurrences | 103 A | xiii |
| to 1898..... | 196 | ix |
| Ores of, notes by Goodwin..... | 214 | vi |
| Rabbit lake..... | 29 B | xiv |
| South Africa..... | 70 B | xiv |
| South Australia..... | 70 B | xiv |
| Statistics, 1892..... | 11 | ii |
| 1893..... | 8, 10 | iii |
| 1894..... | 11, 20-22 | iv |
| 1895..... | 19 | v |

| | Page. | Vol. |
|--|---------------|------|
| Cobalt. — <i>Con.</i> | | |
| Statistics, 1904..... | 8, 9 A | xiv |
| 1905..... | 9 A | xv |
| 1906..... | 3, 5, 6, 10 A | xvi |
| world's production, 1896-1900..... | 70 B | xiv |
| See also Cobalt dist. and Sudbury dist. | | |
| Sudbury ores..... | 90 | i |
| Drury tp..... | 166 | ii |
| percentage of..... | 151 c | xiv |
| small..... | 193 | ii |
| source of..... | 283 | xii |
| statistics, 1892-94..... | 288 | xii |
| 1892-1904..... | 154 c | xiv |
| Tudor tp., with bismuthinite..... | 203 | xi |
| United States..... | 71 B | xiv |
| Value of, 1905..... | 15 B | xiv |
| 1906..... | 11 A | xvi |
| to silver miners at Cobalt..... | 2, 11 A | xv |
| Wallace mine..... | 7 A | xvi |
| Wendigo lake..... | 218 A | xvi |
| arsenate. See Erythrite. | | |
| arsenide. See Smaltite. | | |
| bloom. See Erythrite. | | |
| glance. See Cobaltite. | | |
| glass. | | |
| Composition of..... | 73 B | xiv |
| oxide. | | |
| United States, production, 1888.. | 525 | R C |
| Value of..... | 103 A | xiii |
| Cobalt, COLEMAN TP., NIP. | | |
| See also Cobalt dist. and Coleman tp. | | |
| Boom of..... | 48 A | xv |
| notes on..... | 14 A | xvi |
| Boring at, with Govt. drill..... | 28 A | xv |
| Cobalt ores of, not paid for..... | 8 A | xv |
| Dividends paid by silver mines of, 12, 13 A..... | 13 A | xvi |
| Freight rate from, to N.Y..... | 5 A | xiv |
| Mining class at..... | 44 A | xv |
| Recorder's office at..... | 36 A | xvi |
| Naming of..... | 40 A | xiv |
| 10 B..... | 10 B | xiv |
| Ores of, origin..... | 5, 6 B | xiv |
| purchasers..... | 11, 12 A | xvi |
| Photos of, Bank of Commerce... 66 B..... | 66 B | xiv |
| Imperial Bank..... | 67 B | xiv |
| station and hotel..... | 12, 13 B | xiv |
| station and pharmacy..... | 64 B | xiv |
| Rocks at and near, diabase..... | 219 A | xvi |
| See also Cobalt dist. | | |
| Silver at, discovery..... | 2 A | xiii |
| 7 A..... | 7 A | xvi |
| report by Miller..... | Pt. B | xvi |
| dist., NIP. | | |
| Arsenic production, 1905..... | 23 A | xv |
| 1906..... | 25 A | xvi |
| Notes by Gibson, 1904..... | 4, 5 A | xiv |
| 1905..... | 5-10 A | xv |
| Ores of, compared to ores of Port Arthur dist..... | 61 A | xvi |
| sulphur in..... | 22 A | xvi |
| Prospecting in, difficulties of... 9 A..... | 9 A | xvi |
| Report on, by Miller..... | Pt. B | xvi |
| Rocks of, diabase..... | 213 A | xvi |
| Keewatin, character... 207 A..... | 207 A | xvi |

| | Page. | Vol. |
|--|------------|------|
| Cobalt, COLEMAN TP.—<i>Con.</i> | | |
| Silver production, 1904..... | 15 B | xiv |
| 5 A..... | 5 A | xiv |
| 1905..... | 15 B | xiv |
| 8 A..... | 8 A | xv |
| 1906..... | 8-10, 15 A | xvi |
| 1907. See Appendix to this Index. | | |
| Smelter for ores of, at Copper Cliff:— | | |
| description..... | 65, 66 A | xvi |
| notes..... | 64, 65 A | xv |
| statistics..... | 11, 12 A | xvi |
| Veins of, depth..... | 6 B | xiv |
| Wages at, price, 1906..... | 189 A | xvi |
| =American Development Co. | | |
| Capital and date of charter..... | 28 A | xvi |
| and Hudson Bay Development Co. | | |
| Capital and date of charter..... | 28 A | xvi |
| and Larder Lake Gold Mg. Co. | | |
| Capital and date of charter..... | 29 A | xvi |
| and New Ontario Prospectors, Developers and Investors, Ltd. | | |
| Capital and date of charter..... | 28 A | xvi |
| and Silver Mg. Co. | | |
| Owners, McKinley-Darragh mine. 5 A..... | 5 A | xiv |
| 7 A..... | 7 A | xv |
| Annex Silver Mines. | | |
| Capital and date of charter..... | 28 A | xvi |
| Bullion Mines. | | |
| Capital and date of charter..... | 28 A | xvi |
| Canadian Mining and Milling Co. | | |
| Capital and date of charter..... | 25 A | xv |
| Central Silver Mg. Co. | | |
| Capital and date of charter..... | 29 A | xvi |
| Chartered Co. | | |
| Capital and date of charter..... | 29 A | xvi |
| Chief Silver Mg. Co. | | |
| Capital and date of charter..... | 28 A | xvi |
| Consolidated Mines. | | |
| Capital and date of charter..... | 28 A | xvi |
| Contract Silver Mines Co. | | |
| Capital and date of charter..... | 29 A | xvi |
| Development Co. | | |
| Exhibits of, at Buffalo..... | 25 A | xv |
| Diamond Drilling and Development Co. | | |
| Capital and date of charter..... | 28 A | xvi |
| hill mine, COBALT LAKE, NIP. | | |
| Bismuth from..... | 22 B | xiv |
| Notes and photo..... | 19-21 B | xiv |
| Ore from, analysis..... | 20, 21 B | xiv |
| Rocks at, strike of..... | 36 B | xiv |
| Silver from, specimens for Louisiana Exhibition..... | 16 B | xiv |
| Smaltite from, diagram of crystals. 21 B..... | 21 B | xiv |
| (OR Long) lake, COLEMAN TP., NIP. | | |
| Auriferous sand on..... | 9 A | xv |
| Crushing plant on..... | 80 A | xv |
| Cobalt-arsenic ore from, analysis. 22 B..... | 22 B | xiv |
| Forest fire on, photo..... | 72 B | xiv |

| | Page. | Vol. | | Page. | Vol. |
|--|---------|--------|---|-----------|--------|
| Cobalt (or Long) lake.—<i>Con.</i> | | | Cobb Gold Mining Co. | | |
| Rocks on and near..... | 98, 100 | A xiii | Capital and date of charter..... | 9 | viii |
| brecia..... | 7 | A xv | Cobden, Ross tp., RENFREW CO. | | |
| dip..... | 36 | B xiv | Marl near..... | 122 | A xiv |
| greywacke..... | 20 | B xiv | Trenton formation at..... | 104 | B xiii |
| Keewatin..... | 44 | B xiv | Mining Co. | | |
| Silver on..... | 96-100 | A xiii | Work by, Cobden tp..... | 41 | A xvi |
| mining. <i>See</i> La Rose silver | | | tp., ALG. | | |
| mine. | | | Copper mining in..... | 41, 70 | A xvi |
| veins..... | 26, 27 | B xiv | <i>See also</i> Blind River. | | |
| Lake Mg. Co. | | | Coboconk, BEXLEY TP., VICTORIA | | |
| Capital and date of charter..... | 28 | A xvi | CO. | | |
| Merchants' Mg. Co. | | | Analysis of limestone from..... | 113, 114 | B xiii |
| Exhibits of, at Buffalo..... | 25 | A xv | Cobourg, HAMILTON TP., NORTHUM- | | |
| Merger, Ltd. | | | BERLAND CO. | | |
| Capital and date of charter..... | 28 | A xvi | Beach at..... | 239 | A xiii |
| Mines Syn. | | | altitude..... | 222 | x |
| Capital and date of charter..... | 28 | A xvi | Boulders near..... | 244 | viii |
| Monarch Mg. Co. | | | Brick-yards at, notes on..... | 85 | B xv |
| Capital and date of charter..... | 28 | A xvi | Limestone at, fossiliferous..... | 40, 89 | B xiii |
| Native Silver Mg. Co. | | | Nepheline - syenite, containing | | |
| Capital and date of charter..... | 28 | A xvi | corundum..... | 244 | viii |
| North-Ontario Mg. Co. | | | notes by Miller.. | 252 | viii |
| Capital and date of charter..... | 28 | A xvi | and Peterborough Ry. Co.. | 21 | ii |
| Nugget Silver, Ltd. | | | Cochrane, A. S. | | |
| Capital and date of charter..... | 28 | A xvi | Huronian found by, Sask. and | | |
| Ore Sampling Co. | | | Alta..... | 247 | v |
| Capital and date of charter..... | 29 | A xvi | Reference to surveys by, Atha- | | |
| Ores, Ltd. | | | baska lake..... | 8 | R C |
| Capital and date of charter..... | 28 | A xvi | Hon. Frank | | |
| Portage Mines. | | | Gold mining by, Scadding tp.... | 76 | xii |
| Capital and date of charter..... | 29 | A xvi | Part owner, Blue Lake nickel | | |
| Smelting and Refining Co. | | | mine..... | 285 | xi |
| Capital and date of charter..... | 29 | A xvi | Transmittal letters to and from. | | |
| Smiley Mining Co. | | | | vii, viii | A xv |
| Capital and date of charter..... | 28 | A xvi | | 1, 2 | A xvi |
| Silver and Copper Mg. Co. | | | Neal | 239 | i |
| Capital and date of charter..... | 29 | A xvi | | 250 | ii |
| Silver Prince. | | | R. B. | | |
| Capital and date of charter..... | 28 | A xvi | Gold mining by, Michipicoten div. | 115 | ix |
| Silver Queen, Ltd. | | | | 140 | x |
| Capital and date of charter..... | 28 | A xvi | | 73 | xi |
| Dividends in 1907..... | 13 | A xvi | | 65 | xii |
| Purchase by, of Silver Queen | | | Cochrane and Williams. | | |
| mine..... | 12 | A xvi | Oil refinery established by, 1872. | 27 | v |
| Silver Queen silver mine. | | | Cockburn island, GEORGIAN BAY, | | |
| <i>See</i> Silver Queen silver mine. | | | L. HURON. | | |
| Townsite Mg. Co. | | | Limestones of, dolomite, analysis. | 13 | B xiii |
| Capital and date of charter..... | 28 | A xvi | for smelting..... | 2, 13 | B xiii |
| Union Mines, Ltd. | | | sulphite pulp. | 76 | B xiii |
| Capital and date of charter..... | 28 | A xvi | notes on..... | 79 | B xiii |
| Cobaltiferous wad. <i>See</i> Asbolite. | | | Cock's-comb pyrites. <i>See</i> Marcasite. | | |
| Cobaltite (COBALT GLANCER). | | | Cockshutt, W. F. <i>See</i> Cockshutt | | |
| Bucke tp..... | 31 | B xiv | plough works. | | |
| Benn mine..... | 51 | A xvi | bridge, GRAND RIVER. | 33 | B xiii |
| Carrying arsenic..... | 101 | xi | plough works, BRANTFORD. | | |
| Coleman tp..... | 86 | A xv | Gas at, log of well..... | 106 | A xiv |
| Cobalt, Ont., analysis..... | 23 | B xiv | Oil at..... | 25 | A xiii |
| formula..... | 12 | B xiv | Cod. | | |
| Description of..... | 214 | vi | Ungava bay, Lab..... | 133 | iv |
| Hardness of..... | 202 | vi | Codd, Dr. H. R. | 34 | A xv |
| Norway..... | 67 | B xiv | | 34 | A xvi |
| Pihuamo, Mexico..... | 71 | B xiv | Code—? | | |
| Spar island, L. Superior..... | 56 | B xiv | Measurements by, of limestone, | | |
| Specific gravity of..... | 202 | vi | Bothwell oil-field..... | 20 | vi |
| Timagami, near..... | 31 | B xiv | Codrington, BRIGHTON TP., NORTH- | | |
| Cobb, W. H. | | | UMBERLAND CO. | | |
| Gold on Sturgeon lake, Th. B. d., | | | Gravel deposits near..... | 231 | A xiii |
| discovered by..... | 40 | x | Cody, T. | 40, 41 | A xiii |
| Notes by, on rocks near Ignace.. | 161 | vii | | | |

| | Page. | Vol. | | Page. | Vol. |
|--|----------|--------|--------------------------------------|---------------|--------|
| Cody tp., ALG. | | | Coin clippers. | | |
| Soil in, character..... | 131 | A xiii | Saxony..... | 80 | B xiv |
| Trees in..... | 124 | A xiii | Coinage. | | |
| Coe, Arthur W. | | | Nickel for..... | 373 | R C |
| See also Coe Hill iron mine. | | | | 145 | ii |
| Coe iron mine managed by..... | 90 | A xv | | 164 | C xiv |
| owned by..... | 262 | xi | composition..... | 184 | iv |
| Contract between, and Anglo- | | | countries using, list of.. | 161 | ii |
| American Iron Co..... | 106 | ii | | 224 | ix |
| Cook iron mine owned by..... | 31 | viii | Germany..... | 182 | iv |
| Iron mining by, Bagot tp..... | 128 | R C | Coke. | | |
| | 275 | v | Analysis of..... | 166 | vi |
| Moore iron mine worked by.. | 20, 47 | xii | Canadian production, 1886-87... | 243 | R C |
| St. Charles and Welch iron mines | | | Heating power of..... | 480 | R C |
| worked by..... | 32 | viii | iron. | | |
| George S..... | 141, 156 | vi | *Notes, by the Commissioners, on | | |
| H. J..... | 91 | ix | production of..... | 216, 217 | R C |
| William | | | <i>Colaptes auratus.</i> See Flicker | | |
| Appointed on R. C..... | x | R C | Colborne, CRAMAIE TP., NORTH- | | |
| Letter by (and others) as Royal | | | UMBERLAND CO. | | |
| Commissioner..... | xxiv | R C | Beach near..... | 230, 231, 239 | A xiii |
| Iron prospecting by, Madoc tp.. | 154 | A xvi | altitude..... | 222 | x |
| Sudbury locations owned by..... | 170 | C xiv | Gravel bars near, splitting up of. | 235 | A xiii |
| Coe apatite mine, LOUGHBOROUGH | | | tp., HURON CO. | | |
| TP., FRONTENAC CO. | | | Limestone from, analysis; sec- | | |
| Notes on, 1892..... | 251 | ii | tion of strata in..... | 67 | B xiii |
| Hill, WOLLASTON TP., HASTINGS | | | Colby, Albert Ladd | | |
| CO. | | | Ref. to paper by, on nickel- | | |
| Copper at, native..... | 197 | ix | steel..... | 165, 166 | C xiv |
| Iron ore at, shown at World's | | | iron mines, PENOKEE-GOGEBIC | | |
| Fair..... | 82 | ii | RANGE, U.S..... | 146 | iii |
| mining..... | 59 | ii | Colchester tps., ESSEX CO. | | |
| See also Coe Hill iron mine. | | | Iron ore in..... | 23 | ii |
| Mica-syenite near..... | 214 | viii | Natural gas in..... | 120 | i |
| Hill iron mine, WOLLASTON TP., | | | log of boring for..... | 114, 115 | A xiv |
| HASTINGS CO. | | | Trenton formation in, position | | |
| Notes on, by Merritt..... | 127 | R C | of..... | 113 | A xv |
| Ores of, tests on..... | 103 | ix | Colcleugh, G. W. | | |
| | 333 | xii | Gold mining by, L. of the Woods. | 102 | vi |
| sulphur in..... | 86 | ii | | 43 | vii |
| Output from, 1901..... | 262 | xi | Cold Rolled Steel Co. | 119 | ii |
| Rocks of..... | 57 | ii | Coldwater river, L. SIMCOE. | 89 | B xiii |
| Section of formation in..... | 127 | R C | Cole, Arthur A. | | |
| Hill Mining Co. | | | Notes by, on gold on Night-hawk | | |
| Capital and date of charter..... | 7 | vii | lake..... | 219 | A xvi |
| Notes on, by Ritchie..... | 106 | ii | Work by, 1893..... | 61 | vi |
| iron mine, MADOC TP., HAST- | | | L. C..... | 103 | viii |
| INGS CO. | | | Coleman, Prof. A. P. | | |
| Copper in..... | 94, 95 | A xiii | Acknowledgments to..... | 142 | ix |
| pyrites in..... | 80 | A xiv | | 169 | vi |
| Notes on, 1901..... | 262 | xi | | 161 | vii |
| 1902..... | 115 | xii | | 196 | viii |
| 1905..... | 90, 91 | A xv | Analysis by, of brick-clays. | 128, 129 | iii |
| Coffey (KAMISKIC-TAIA-SAGAIGAN) | | | Appointment of..... | 13 | iii |
| river, MATTAGAMI RIVER. | | | | 4 | iv |
| Description of, by Kerr..... | 119 | A xv | | 4 | v |
| main river near.. | 118 | A xv | Assay by, of galena, McTavish tp. | 38 | R C |
| Rocks at and near mouth of. | 132, 133 | A xv | Corundum found by, in boulder | | |
| Trees along..... | 139 | A xv | at Cobourg..... | 244 | viii |
| Coffin tp., ALG. See Aberdeen tp. | | | Description by, of: | | |
| Cohen, S. W. | 83 | A xv | anorthosite, Seine river..... | 226 | viii |
| and Bradley..... | 199 | A xiii | asbestiform mineral, Elzevir tp. | 98 | iii |
| | 67 | C xiv | granite, Regina gold mine. | 184, 185 | v |
| Cohoes, ALBANY CO., N. Y. | | | iron-pyrites deposit, Goudreau | | |
| Waterpower at..... | 485 | R C | lake..... | 179 | A xvi |
| Coimbatore dist., BURMA. | | | rocks, Sandy lake..... | 170 | vii |
| Corundum-bearing rocks of..... | 231 | viii | trap, Poole island..... | 15 | v |
| Coin Silver Mining Co. | | | Divisions by, of rocks of Michipi- | | |
| Capital and date of charter..... | 28 | A xvi | coten div., ref. to..... | 300 | A xiv |

| | Page. | Vol. |
|---|----------|--------|
| Coleman, Prof. A. P.—<i>Con.</i> | | |
| Examination by, of: | | |
| cores from Bothwell dist. | 18, 19 | vi |
| jasplite outcrop, Alg. | 167, 178 | x |
| rocks from Opasatika river. | 256 | v |
| Instructions by, for a survey of | | |
| the Nipissing-Algonia line. | 167 | vi |
| List by, of minerals found in | | |
| Archean rocks. | 169 | i |
| Notes by, on: | | |
| Bear pyrites claim. | 179, 180 | A xxi |
| Big Dan claim. | 105 | xi |
| cement rock, Port Colborne. | 34 | xi |
| cores from Dunwich tp. | 15 | viii |
| geological features of Deloro | | |
| g. l. | 59, 60 | vi |
| geology of Silver islet and | | |
| vicinity. | 137, 138 | vi |
| iron ores of Ontario. | 96, 97 | ii |
| Mikado gold mine. | 256 | vi |
| petrography of Ontario. | 145, 150 | B vii |
| Papers by, on: | | |
| anthraxolite. | Bull. ii | |
| building-stones. | 159-161 | vi |
| nepheline-syenite. | 133-136 | iii |
| syenites near Port Coldwell. | 250-253 | viii |
| syenites near Port Coldwell. | 208 | xi |
| Petrography by, of quartzite from | | |
| Aberdeen tp. | 77 | A xiii |
| Professor of Metallurgy, School | | |
| of Science, Toronto. | 215 | i |
| Pyrites reported by, Nickel | | |
| lake. | 150, 175 | A xvi |
| Reports by:— | | |
| 1892. Ontario minerals at the | | |
| World's Fair. | 185-194 | ii |
| 1894. Gold in Ontario. | 35-100 | iv |
| 1895. Gold-fields of Western | | |
| Ont. | 47-106 | v |
| 1896. Gold-fields of Western | | |
| Ont. | Bull. i | |
| 71-124 | | vi |
| 1897. Gold-fields of Western | | |
| Ont. | 109-144 | vii |
| *1898. Michipicoten iron range. | | |
| 354-358 | | viii |
| Copper-Regions of the | | |
| Upper Lakes. | 120-174 | viii |
| Copper in Parry Sound | | |
| dist. | 259-262 | viii |
| 1899. Copper and Iron re- | | |
| gions of Ont. | 143-191 | ix |
| 1900. Marine beaches in East- | | |
| ern Ont. | 215-227 | x |
| Iron ranges of the | | |
| Lower Mountain. | 181-212 | x |
| Vermilion River placers. | | |
| 151-159 | | x |
| 1901. Michipicoten iron range. | | |
| 152-185 | | xi |
| Iron ranges of north- | | |
| western Ont. | 128-151 | xi |
| 1902. Sudbury nickel deposits. | | |
| 235-299 | | xii |

* In collaboration with Willmott.

| | Page. | Vol. |
|---|-----------|--------|
| Coleman, Prof. A. P.—<i>Con.</i> | | |
| Reports by.— <i>Con.</i> | | |
| 1903. Iroquois Beach in Ont. | 225-244 | A xiii |
| ref. to. | 29 | B xv |
| Northern nickel range. | 192-221 | A xiii |
| 1904. Sudbury nickel region. | Pt. C | xiv |
| ref. to. | 11 | B xiv |
| 12 | | A xv |
| 1905. Iron ranges of eastern | | |
| Michipicoten. | 173-199 | A xv |
| ref. to. | 217 | A xvi |
| 1906. Iron ranges east of L. | | |
| Nipigon. | 105-135 | A xvi |
| Surveys by, references to:— | | |
| Cobalt. | 212 | A xvi |
| Minnitaki lake. | 165 | vii |
| Mississagi river. | 169 | xii |
| Vermilion River basin. | 17 | xi |
| Syenites shewn by, at Pan- | | |
| American Exhibition. | 87 | xi |
| Views of, re diamonds in Rainy | | |
| Lake reg. | 124 | ix |
| Work by, 1894. | 3, 5 | v |
| 1895. | 3, 4 | v |
| 1900. | 6 | x |
| 1901. | 6, 7 | xi |
| 1902. | 5 | xii |
| 1903. | xii, xiii | A xiii |
| 1904. | xvi | A xiv |
| 1905. | 15 | A xv |
| 50 | | xi |
| Dr. H. | | |
| Dr. Timothy F. | | |
| Evidence by, before R. C. re | | |
| salt at Seaforth. | 54, 187 | R C |
| industry. | 236 | R C |
| <i>See also</i> Coleman Salt Co. | | |
| W. | | |
| and Bucke Consolidated | | |
| Cobalt Silver Mg. Co. | | |
| Capital and date of charter. | 25 | A xv |
| and Quebec Mg. Co. | | |
| Capital and date of charter. | 29 | A xvi |
| Cobalt Mg. Co. | | |
| Exhibits of, at Buffalo. | 25 | A xv |
| Development Co. | | |
| Capital and date of charter. | 25 | A xv |
| Mining division. | | |
| Creation and description of. | 36, 37 | A xvi |
| Salt Co. | | |
| Operating salt, Seaforth. | 111 | ix |
| 38 | | xii |
| tp., Nir. | | |
| <i>See also</i> Cobalt and Cobalt dist. | | |
| Arsenic production, 1904. | 22 | A xiii |
| Cobalt in, abundant. | 11 | A xv |
| output, 1904. | 8 | A xiv |
| Constituted a mining division. | 37 | A xvi |
| Diamond drilling in, with Govt. | | |
| drill. | 31 | A xvi |
| Nickel in. | 145 | C xiv |
| output of, 1904. | 10 | A xiv |
| Silver-cobalt ores of, report by | | |
| Miller. | 9-54 | B xiv |
| Pt. B | | xvi |
| mining in, 1904. | 5 | A xiv |
| 1905. | 7 | A xv |
| notes. | 73-87 | A xv |
| Smaltite in. | 11, 48 | A xv |

| | Page. | Vol. | | Page. | Vol. |
|--|------------|------|---|------------|------|
| <i>Coleolus</i> . | | | Colorado, U. S. | | |
| Kwataboahagan river..... | 188 A | xiii | Amazon-stone in..... | 236 | vii |
| <i>tenuicinctum</i> . | | | Analcite-basalt from, analysis..... | 173 | viii |
| Kwataboahagan river..... | 188 A | xiii | Custom mills and smelters in, | | |
| photo, in limestone..... | 192 A | xiii | notes by Major Long .. | 34 | iii |
| <i>tennistriatus</i> . | | | Gypsum in..... | 119 | R C |
| Kwataboahagan river, notes, dia- | | | Mining laws of, notes by Roy. | | |
| gram and photo..... | 188, 192 A | xiii | Com..... | 280 | R C |
| <i>Coleophora</i> . See Birch, case-bearer | | | Veins of, character..... | 202 | R C |
| Coleridge, William | 124 | i | <i>beetle</i> . | | |
| Colland, W. & Son . | | | Destructive agent for..... | 19, 251 | iv |
| Brick-yard of, notes..... | 104 B | xv | Paris green .. | 116 | xi |
| Collier, W. | 102 A | xv | Fort Mattagami..... | 129 A | xiii |
| Collings, C. H. | 1 Bull. ii | | Unknown at Moose Factory..... | 107 | iv |
| | 159 | vi | School of Mines. | | |
| "Collingwood" (SKIFF) | 147 | viii | Notes on, by Richards..... | 509 | R C |
| Collingwood, NOTTAWASAGA TP., SIM- | | | "Colour" of gold | 531 | R C |
| COE CO. | | | | 257 | vii |
| Beaches at, height of..... | 155 | viii | Colpoj Bay, ALBERMARLE TP., BRUCE | | |
| | 176, 177 | ix | co. | | |
| Bituminous shales at..... | 206 | ix | Cement works on..... | 34 | xii |
| analysis..... | 109 B | xiii | | 17, 19 A | xiii |
| Blast furnace at, photos..... | 160, 161 | xii | | 139 A | xiv |
| projected..... | 17 | ix | See also Colonial Portland | | |
| | 25 | x | Cement Co. | | |
| See also Cramp | | | Clinton formation at..... | 19, 50 B | xiii |
| Steel Co. | | | Medina "..... | 43 | R C |
| Coal at, reported..... | 203 | ii | Niagara "..... | 36 B | xiii |
| Epsomite near..... | 198 | ix | Columbia College, N. Y. | | |
| Lithographic stone from, analysis..... | 110 B | xiii | System employed at..... | 416, 417 | R C |
| Natural gas in..... | 151 | R C | | 212 | i |
| Water-levels at..... | 151 | viii | notes by Galbraith..... | 425 | R C |
| <i>harbour</i> , GEORGIAN BAY. | | | Yather..... | 502, 503 | R C |
| Rocks on: oil near..... | 41, 42 | R C | Richards..... | 509, 510 | R C |
| tp., GREY CO. | | | Columbite. | | |
| Artesian wells in..... | 59 | i | Black hills, S. Dakota..... | 236, 237 | vii |
| Beach in. See Clarksburg. | | | Composition and hardness of..... | 218 | vi |
| Brick-yards in. See Thornbury. | | | Lyndoch tp..... | 197, 211 | ix |
| Cambro-Silurian in..... | 48 B | xiii | notes..... | 234-236 | vii |
| Niagara formation in..... | 44 | R C | photo of beryl crystals..... | 222 | vii |
| Collins, John | 58, 110 | vii | Relation of, to tantalite..... | 235 | vii |
| Major..... | 23 | xii | Columbus, Christopher | 61 B | xiv |
| bay, L. ONTARIO..... | 221 | x | Joseph See Columbus silver | | |
| inlet, GEORGIAN BAY. | | | mine. | | |
| Limestone in, notes on..... | 29 B | xiii | Columbus, Ohio. | | |
| Colomb, Sir J. C. Ready | 143 | ii | Brick pavement in..... | 109 | iii |
| Colombia. | | | clay for, analysis..... | 119, 120 | iii |
| Nickel coinage in..... | 161 | ii | Corniferous formation in, thick- | | |
| Colonial and Indian Exhbtn. | 266 | v | ness..... | 156 | i |
| Copper Co. | | | Shales from, analysis..... | 119 | iii |
| Work by, Hastings co..... | 31 | ix | Cobalt Silver Mfg. Co. | | |
| Mines Co. of Ontario. | | | Capital and date of charter..... | 29 A | xvi |
| Capital and date of charter..... | 9 | x | Work by, Coleman tp..... | 86 A | xv |
| Mining Co. | | | Sewer Pipe Co. | | |
| Capital and date of charter..... | 29 A | xvi | Analysis of shale used by..... | 119 | iii |
| Oil Co. | | | <i>Columnaria alveolata</i> . | | |
| Capital and date of charter..... | 37 A | xiii | Port Colborne .. | 14 B | xiii |
| Portland Cement Co. | | | Colvocoresses, G. M. | 103 A | xiii |
| Analysis of shale and marl used | | | <i>Comandra livida</i> . | | |
| by..... | 183 A | xiv | Abitibi dist..... | 241 A | xiv |
| Capital and date of charter..... | 8 | xii | Mattagami valley..... | 150 A | xv |
| directors..... | 19 B | xiii | <i>" pallida</i> . | | |
| Notes on, 1902..... | 34 | xii | Abitibi dist..... | 241 A | xiv |
| 1904..... | 139-141 A | xiv | Comber, TILBURY, W. TP., ESSEX CO. | | |
| Plant of, erection..... | 17 A | xiii | Brick-yard at, notes on..... | 63 B | xv |
| | 18 A | xiv | Gas in, boring for..... | 153 | R C |
| | 17 A | xv | Oil in..... | 156, 158 | R C |
| photos..... | 139, 140 A | xiv | | 116, 117 A | xiv |
| | | | | 108 A | xv |

| | Page. | Vol. | | Page. | Vol. |
|--|--------------|------|--|------------|------|
| Comber.—Con. | | | Committee on Geological Nomenclature. | | |
| Salt in, bore-hole record..... | 186 | R C | Description by, of geological formations at Black bay..... | 29 A | xiv |
| oil well, PELEE ISLAND, L. ERIE. | | | Report by, on Pre-Cambrian nomenclature..... | 269-277 A | xiv |
| Boring log of..... | 43 B | xiii | Commodore cape, GEORGIAN BAY, L. HURON. | | |
| Combermere, REDCLIFFE TP., REN-FREW CO. | | | Cambro-Silurian at and near...48, 50 B | xiii | |
| Corundum near..... | 218, 221 | vii | Commonwealth Jewel Oil Co. | | |
| mining. <i>See</i> Canada Corundum Co. | | | Capital and date of charter..... | 31 A | xvi |
| Combination gold mine, GOLD LAKE, L. OF THE WOODS. | | | Comstock gold mine, NEAR BOLAND LAKE, NIP. | | |
| Evidence <i>re</i> , before R. C..... | 116, 117 | R C | Notes on, 1896..... | 269 | vi |
| Notes on..... | 21, 25 | iii | 1897..... | 84, 85 | vii |
| Combined gold mine, NEAR CAMP BAY, L. OF THE WOODS. | | | Gold Mining and Development Co. | | |
| <i>See also</i> Combined Gold Mines Co. | | | Capital and date of charter..... | 8, 85 | vii |
| Idle, 1900..... | 73 | x | Minor ref. to..... | 139 | vii |
| Notes on, 1903..... | 62, 63 A | xiii | lode, NEVADA. | | |
| 1904..... | 48 A | xiv | Argentite in..... | 207 | vi |
| 1905..... | 55, 58, 59 A | xv | Boring in, for silver..... | 164 | iii |
| Photos of..... | 80, 81 | ix | Concentration. | | |
| Re-opening of, expected, 1906...48, 49 A | xiii | | <i>See also</i> Magnetic concentration. | | |
| Work at, 1898..... | 61, 277 | viii | Definition of..... | 322 | xii |
| 1899..... | 50 | ix | Concession (OF TOWNSHIP). | | |
| 1906..... | 60 A | xvi | Explanation of..... | 218 | vii |
| Gold Mines Co. | | | apatite mine, LOUGHBORO TP., FRONTENAC CO. | | |
| Capital and date of charter..... | 8 | vii | Notes on, 1891..... | 240 | i |
| Comego, S. | 184 A | xiv | 1892 (idle)..... | 251 | ii |
| Comerford, J., W. J. | 102 | vii | Concrete. | | |
| Iron mining by, Madoc tp...31, 32 | viii | | Making of, notes..... | 173 A | xiv |
| Comet iron mine, PENOKEE-GOGEBIC RANGE, U.S. | 146 | iii | Specifications for, from Portland cement..... | 180, 181 A | xiv |
| Mica Co. | | | Uses of..... | 174 A | xiv |
| Mica trimming works of, Ottawa. | 106 A | xv | Condensed Peat Fuel Co. | | |
| | 91 A | xvi | Capital and date of charter..... | 24 A | xiv |
| Commanda, GURD TP., P.S.D. | | | Cone butte, JUDITH MTS., MONTANA. | | |
| Rock from, petrography..... | 182 | ix | Analysis of tinguaitite-porphyr from..... | 189 | ix |
| Commercial Brick Co. | | | Conestogo, WOOLWICH TP., WATER-LOO CO. | | |
| Capital and date of charter..... | 29 A | xvi | Brick-yard at, notes..... | 104 B | xv |
| Mining Co. of Algoma. | | | clay used in, analysis..... | 17 B | xv |
| Brick works of, Sault Ste. Marie. | 57 B | xv | Lacustrine...28 B | xv | |
| Blue Lake nickel mine acquired by..... | 285 | xi | river, WATERLOO CO. | | |
| | 273 | xii | Lacustrine clay on..... | 29 B | xv |
| Capital and date of charter..... | 8 | vii | Coney island, L. OF THE WOODS. | | |
| Elsie nickel mine acquired by...281 | xi | | Minor refs. to..... | 13 | iii |
| Emily gold mine..... | 77 | xii | | 187 | v |
| Exploratory work by, in | | | Part of, adrift..... | 109 | vi |
| Algoma..... | 92 | xi | Congdon, L. A. | 137 | i |
| Atikokan range..... | 266 | xi | Conger tp., P. S. D. | | |
| Godon lake (near)..... | 322 A | xiv | Copper prospecting in..... | 121 | x |
| Michipicoten div..... | 331 A | xiv | Congking river, MISSINAIBI RIVER, ALG. | 145 A | xiii |
| Nipigon Lake dist..... | 265 | xi | Congkling magnetic separator. | | |
| | 127 A | xvi | Description of..... | 347, 348 | R C |
| Frances Lake iron mine acquired by..... | 328 A | xiv | Conglomerate. | | |
| Grace mine worked by..... | 4 A | xiii | Animikie iron range, notes and photo..... | 160, 161 A | xv |
| <i>See also</i> Grace mine. | | | Cobalt, Ont., boulders, notes by Miller..... | 212 A | xvi |
| Hotel and store of, at Michipicoten harbour..... | 127 | x | Definition of..... | 235 | vi |
| Quartz mined by, for convertor-linings..... | 26 A | xvi | Huronian, notes by Coleman, 183-185 | ix | |
| Rocks on claims of, Iron lake...319 A | xiv | | 203, 204 | x | |
| Work by, Michipicoten div. 1900. | 139 | x | Lake Superior, north shore..... | 129 | vi |
| 1901. | 71, 72 | xi | notes by Coleman..... | 163-167 | viii |
| 1902. | 62 | xii | photo of cave in..... | 152, 153 | viii |
| licence to..... | 65 | xii | | | |

| | Page. | Vol. |
|--|------------|------|
| Conglomerate. — <i>Con.</i> | | |
| Larder lake, boulder, photo.... | 210 A | xvi |
| section showing.... | 205 A | xvi |
| Nipigon Lake dist. 112, 113, 146, 147 A | xvi | |
| Pitti palace built of | 134 | iii |
| Rainy Lake dist, notes by Coleman..... | 46 | iv |
| Seine River dist..... | 97, 98 | v |
| | 134 | xi |
| Trout lake, Bowell tp., notes by Coleman..... | 39, 94 C | xiv |
| petrography..... | 129, 130 C | xiv |
| Congress Oil Co. | 97 A | xvi |
| Coniagas Mines, Ltd. | | |
| Capital and date of charter..... | 29 A | xvi |
| Dividends, 1907..... | 13 A | xvi |
| silver mine, COBALT, NIP. | | |
| Notes on..... | 76 A | xv |
| Producing | 15 B | xiv |
| | 7 A | xv |
| Conjuring booths (INDIAN). | | |
| Notes on, by Coleman..... | 93 | vi |
| Photo of, L. of the Woods..... | 80, 81 | vi |
| Conjurors House, MISSINAIBI RIVER, | | |
| ALG..... | 178 A | xiii |
| portage, MISSINAIBI RIVER..... | 194 | viii |
| Conlon, Thos.; Frances T.; John J. | | |
| Govt. drill lent to..... | 43, 45 A | xiii |
| Licences to..... | 103 | viii |
| | 115 | ix |
| Conly, L. H. | 102 | vii |
| Conmee, James | | |
| Evidence by, before Royal Com. | | |
| <i>re</i> free-trade..... | 232 | R C |
| Govt. aid to mining..... | 426 | R C |
| mining laws..... | 312 | R C |
| Notes by, on iron ores W. of Port Arthur. 68-70 | ii | |
| ref. to.... | 142 | v |
| President, Tycoon Mg. and Dev. Co | 58 | ix |
| Statement by, <i>re</i> iron-mining in Canada..... | 112-114 | ii |
| Conmee tp., TH. B.D. | | |
| Iron in..... | 129, 130 | xi |
| notes by Fraleck..... | 172 A | xvi |
| pyrites, mining..... | 107 | x |
| weathering..... | 184 A | xvi |
| Connemeyer, N. | 73 | xi |
| Connellsville, FAYETTE CO., PA. | | |
| Coal from, for Butte copper mines..... | 111 | ii |
| Connecticut, U. S. | | |
| Charcoal in, cost of..... | 341 | R C |
| Corundum in..... | 241 | viii |
| river, U. S. | | |
| Waterpower of, at Turners falls.. | 485 | R C |
| Connor—? | 260 | vii |
| Connors—? | 192 | vii |
| <i>Conocarpidium cuneus</i> . | | |
| Kwataboahagan river..... | 188 A | xiii |
| <i>cuneus</i> var. <i>trigonale</i> . | | |
| Anderdon tp..... | 126 | xi |
| <i>trigonale</i> . | | |
| Anderdon tp..... | 125 | xi |
| Beachville (near)..... | 92 B | xiii |
| Hagersville..... | 145 | xii |
| St. Marys..... | 151, 152 | xii |
| | 96 B | xiii |

Consider—?

| | Page. | Vol. |
|--|----------|------|
| Conclusions of, <i>re</i> steel and concrete in buildings..... | 175 A | xiv |
| Consolidated Cariboo Hydraulic Mg. Co. | 8 A | xiv |
| Copper Co. | | |
| Capital and date of charter..... | 8 | xii |
| Work by, Parry Sound dist..... | 116 | xii |
| Gold Fields Development Co. | | |
| Capital and date of charter..... | 8 | vii |
| gold mine, MARMORA TP., HASTINGS CO. | | |
| Arsenious acid manufactured at | 76 | R C |
| Description of..... | 107, 110 | R C |
| Notes on, by Rothwell..... | 106 | R C |
| Treatment of tailings at..... | 111 | R C |
| copper mine, SPIDER LAKE, P. S. D. | | |
| Notes on, 1903..... | 93 A | xiii |
| Mines Co. of L. Superior. | | |
| Big Master g. m. worked by..... | 16 | xii |
| Boring plant purchased by..... | 42 A | xiii |
| Capital of..... | 92 | xi |
| and date of charter.... | 11 | xi |
| Financial embarrassment of..... | 82 A | xiii |
| Lake Superior Power Co. floated by | 87 A | xiii |
| Mines worked by, list of..... | 96 | xii |
| Officers of..... | 92 | xi |
| | 72 A | xiii |
| West-End silver mine sold by... 61 A | xvi | |
| Work by, Port Arthur dist., 1901. | | |
| | 256-258 | xi |
| | 1902. | 16 |
| Works of, at Soo, photo..... | 96. | 97 |
| plan..... | 93 | xi |
| <i>See also</i> Sault Ste. Marie. | | |
| Mg. and Smelting Co. | | |
| Capital and date of charter..... | 31 A | xvi |
| Silver Islet Co. <i>See</i> Silver Islet Co. | | |
| Steel Co. | 119 | ii |
| White Bear Mg. Co. | | |
| Capital and date of charter..... | 11 | xi |
| Constable Hook, N. J. | | |
| Sudbury ores refined at..... | 27 | vii |
| | 146 C | xiv |
| | 11 A | xv |
| | 15 A | xvi |
| <i>See also</i> Orford Copper Co. | | |
| Consumers' Oil Refinery. | | |
| Notes on, by the manager | 164, 165 | R C |
| Consumption. | | |
| Among Indians, Abitibi dist ... | 186 | viii |
| Contact gold mine, ANDREW BAY, L. OF THE WOODS. | | |
| Notes on, 1897..... | 112 | vii |
| portage, MAGPIE RIVER, ALG. | | |
| Description of river near..... | 201 | vii |
| Continuity claim, MICHIPICOTEN DIV. | 139 | x |
| <i>See also</i> Kitchi-Gaumti Gold Mg. Co. | | |
| <i>Contopus virens.</i> <i>See</i> Pewee, wood | | |
| Contraction. | | |
| As a cause of veins..... | 251 | v |
| Contre, Joseph | 87 | vii |
| <i>Conulariula.</i> | | |
| Anderdon tp..... | 125 | xi |

| | Page. | Vol. |
|--------------------------------------|----------|------|
| Converse, E. C..... | 22 | xi |
| <i>Convolvulus sepium.</i> | 172 c | xiv |
| Mattagami valley..... | 151 A | xv |
| Conway, PENN. | | |
| Corniferous formation at, thick- | | |
| ness | 156 | i |
| Cook, C..... | 102 | vii |
| | 140 | x |
| Prof. G. H. | | |
| Views of, on plasticity of clays.. | 34 B | xv |
| G. M. | | |
| Mispickel mining by, Marmora | | |
| tp..... | 197 | xi |
| | 93 A | xiii |
| Henry <i>See</i> Cook amalga- | | |
| mator. | | |
| Prof. Josiah P..... | 507 | R C |
| J. W. | | |
| Gold mining by, Clarendon tp.. | 105 | xi |
| Robert A. | 349 | R C |
| | 339 | xii |
| Thomas | | |
| Brick-making by, Orangeville... | 61 B | xv |
| amalgamator. | | |
| Description of..... | 23 | iii |
| gold mine. <i>See</i> Babcock mine. | | |
| iron mine, MADOC TP., HAST- | | |
| INGS CO. | | |
| Notes on, 1898..... | 31 | viii |
| lake, NEAR SCHREIBER, TH.B.D. | | |
| Pyrites mining on..... | 177 A | xvi |
| <i>See also</i> Otisse pyrites mine. | | |
| Land Co. | | |
| Minor ref. to..... | 14 | xii |
| Mispickel in claims of..... | 102 | xi |
| Work by, Marmora tp..... | 234 | xi |
| | 110 | xii |
| Cook's mills, CASTOR RIVER, OTTAWA | | |
| RIVER. | | |
| Limestone at..... | 108 B | xiii |
| Cooke, A. W..... | 108 | iii |
| Cookstown, TECUMSETH TP., SIMCOE | | |
| CO. | | |
| Iroquois beach at | 229 A | xiii |
| Cooley, W. F..... | 100 | x |
| Coolgardie, WEST AUSTRALIA. | | |
| Water supply of..... | 8 | v |
| Cooper, Dr. E. G..... | 55, 56 | xii |
| Henry | 97 A | xvi |
| John D. | | |
| Oil on farm of, E. Tilbury tp.... | 98 A | xvi |
| Photo of oil works on farm of.. | 96 A | xvi |
| Charles & Co..... | 122 | xi |
| Hewitt & Co..... | 353 | R C |
| | 39 | i |
| Coosaw Mining Co..... | 15 | i |
| river, S. CAROLINA..... | 15 | i |
| Copeland, E..... | 39 A | xv |
| George..... | 81 | xii |
| | 41 A | xiv |
| Brewery, TORONTO. | | |
| Well at, notes by Dingman..... | 152 | R C |
| Copenhagen Milk Supply Co. | | |
| Notes by, on moss-litter instables. | 211 | ii |
| Coplay, LEHIGH CO., PENN. | | |
| Analysis of limestone from..... | 15, 16 B | xiii |
| Copp, William..... | 330, 400 | R C |

Copp's Manual for Prospectors.

| | | |
|---|-----------------|------|
| Extracts from, on determination | | |
| of minerals..... | 447-464 | R C |
| Copper. | | |
| Alloys of, antiquity | 381 | R C |
| with aluminium | 174 | i |
| nickel, notes by | | |
| Levat..... | 159 | ii |
| Chili, production, 1857-67-87.... | 371 | R C |
| Composition of, and formulae ... | 201 | vi |
| Germany, notes on smelting.... | 375 | R C |
| Schaud..... | 146 c | xiv |
| Hardness of native..... | 202 | vi |
| Hints on, to prospectors..... | 455-457 | R C |
| Ores of, notes on minerals in. 211, 212 | | vi |
| Output of, retarded by low price. | | |
| | 68, 97, 101 | R C |
| | 175 | i |
| world's, 1880-1887.... | 371 | R C |
| Percentage of, in nickel coinage. 184 | | iv |
| Price of, 1895 | 211 | vi |
| Portugal, production, 1879, 1887. | 371 | R C |
| Separation of, from nickel, notes | | |
| by Levat | 156 | ii |
| Smelting of ores of, paper on. 234-236 | | i |
| various pro- | | |
| cesses..... | 375 | R C |
| Spain, notes on famous mines. | | |
| | 371, 372 | R C |
| Rio Tinto.... | 178 c | xiv |
| production, 1881, 1887.... | 371 | R C |
| Specific gravity of..... | 202 | vi |
| Test for..... | 449 | R C |
| Canada. | | |
| Belt of, from L. Huron to L. | | |
| Mistassini | 24 | R C |
| Production, 1870, 1880..... | 209 | R C |
| Hints on, 1886..... | 243 | R C |
| 1887..... | 209, 213 | R C |
| 1888..... | 525 | R C |
| retarded by duties.. | 217 | R C |
| Gt. Britain. | | |
| Cornwall..... | 34 | i |
| | 60, 61 | iii |
| Dalcoath tin mine..... | 173 | i |
| production, 1860, 1887..... | 371 | R C |
| Wales, in peal bog..... | 206 | ii |
| ONTARIO. | | |
| Distribution of | 192 | ii |
| | 197 | ix |
| notes by Blue | 175 | i |
| Borron.... | 99 | R C |
| Merritt | 89-90 | R C |
| Evidence <i>re</i> , before R.C..... | 92-106 | R C |
| Mines of, inspector's report on: | | |
| 1891 | 229-234 | i |
| 1892 | 241-243 | ii |
| 1893 | 182-191 | iii |
| 1894 | 239-249 | iv |
| 1895 | 267-274 | v |
| 1896 | 270-277 | vi |
| 1897 | 93-97 | vii |
| 1898 | 33-37 | viii |
| 1899 | 94-101 | ix |
| 1900 | 118-125 | x |
| 1901 | 266-286 | xi |
| 1902 | 97-102, 115-125 | xii |
| 1903..... | 93, 94 A | xiii |

| | Page. | Vol. |
|--------------------------------------|---------------------|--------|
| Copper.—Con. | | |
| ONTARIO.—Con. | | |
| Mines of, inspector's report on : | | |
| 1904..... | 60-67 | A xiv |
| 1905..... | 67-69 | A xv |
| 1906..... | 68-72 | A xvi |
| Report on, by Coleman..... | 143-191 | ix |
| Statistics of, 1870, 1880..... | 210 | R C |
| 1887..... | 210 | R C |
| 1892..... | 11 | ii |
| 1893..... | 8, 10 | iii |
| 1894..... | 11, 20-22 | ix |
| 1895..... | 11, 18, 19 | v |
| 1896..... | 13, 40, 41 | vi |
| 1897..... | ix | viii |
| 1897-98..... | 15, 25 | vii |
| Prefaces to B and C..... | vii | |
| 1898..... | 11, 18 | viii |
| 1899..... | ix | viii |
| 1900..... | 7, 11, 12, 35, 36 | x |
| 1901..... | 7 | x |
| 1902..... | 8-13, 19-21 | xi |
| 1903..... | 8 | xi |
| 1904..... | 12, 13, 17, 18, 288 | xii |
| 1905..... | 2, 6, 7 | A xiii |
| 1906..... | 9-11, 44 | A xiv |
| 1907..... | 1-3, 13 | A xv |
| 1908..... | 3-6, 15, 16 | A xvi |
| method of computing..... | 4 | A xvi |
| Algoma. | | |
| Aberdeen tp..... | 22 | xi |
| Bruce Mines dist.:— | | |
| Bruce mines, cost of mining..... | 66 | iii |
| early mining, 174-177..... | ii | |
| evidence before R. C..... | | |
| 23, 68, 88, 92, 100..... | R C | |
| production..... | 122 | iv |
| revival of interest..... | 129 | ii |
| smelting..... | 402, 403 | R C |
| notes by Bell..... | 23 | R C |
| Blue..... | 35, 36 | iii |
| Coleman, 124, 125, 148, 149..... | viii | |
| Wellington mine..... | 209 | v |
| notes by Blue..... | 36, 37 | iii |
| Brulé harbour, prospecting near..... | 63 | xi |
| Desbarats (near)..... | 188 | x |
| Flat-point island, L. Huron..... | 114 | R C |
| Gargantua cape..... | 205 | vii |
| Mamainse pen..... | 132 | viii |
| Mamainse pen..... | 197 | R C |
| Mamainse pen..... | 194 | ii |
| Mamainse pen..... | 123 | iv |
| Mamainse pen..... | 208, 209 | v |
| early knowledge..... | 110 | v |
| exploratory work..... | 4 | v |
| mining..... | 98, 102 | R C |
| development..... | 4 | iv |
| notes by Coleman..... | 128, 129 | viii |
| Sibley..... | 129-131 | ii |
| paper by Blue..... | 62-78 | iii |
| Dawson..... | 78-82 | iii |
| May tp..... | 68 | A xv |
| Michipicoten, prospecting near..... | 254 | v |

| | Page. | Vol. |
|--|------------------|-----------|
| Copper.—Con. | | |
| Michipicoten island..... | 60 | R C |
| Michipicoten island..... | 123 | iv |
| Michipicoten island..... | 208 | v |
| Michipicoten island..... | 205 | vii |
| Michipicoten island..... | 19, 143 | viii |
| (native)..... | 11 | Bull. iii |
| Mississagi river..... | 164, 165 | xii |
| Narrow bay, Georgian bay..... | 91 | i |
| Point-aux-Mines, notes on abandoned mines..... | 129 | viii |
| Rock lake..... | 19 | viii |
| Rock lake..... | 22 | xi |
| Root river..... | 72 | A xvi |
| Sault Ste. Marie div..... | 205 | R C |
| Sault Ste. Marie div..... | 41 | A xvi |
| Sudbury dist..... | 60 | R C |
| Sudbury dist..... | 89, 90 | i |
| associated with sulphur..... | 22 | A xvi |
| Creighton tp., prospecting for..... | 180 | A xvi |
| Denison tp..... | 425 | R C |
| Graham tp..... | 425 | R C |
| Levack tp..... | 434 | R C |
| notes by Bell..... | 23, 24, 433, 434 | R C |
| production, 1890-1902..... | 288 | xii |
| 1892-1904..... | 154 | C xiv |
| <i>See also above, Ontario, statistics.</i> | | |
| proportion to nickel..... | 378, 405 | R C |
| Snider tp..... | 425 | R C |
| with diorite..... | 434 | R C |
| Trill tp..... | 8 | iii |
| Thompson tp..... | 69 | A xv |
| Upper Lakes, The, report by Coleman..... | 120-174 | viii |
| Welland river (near)..... | 203 | viii |
| Whiskey lake..... | 72 | A xvi |
| Hastings co. | | |
| Coe iron mine..... | 94, 95 | A xiii |
| Coe iron mine..... | 80 | A xiv |
| Eldorado (near)..... | 15, 16, 76, 80 | A xiv |
| Muskoka dist. | | |
| Brunel tp., boring for..... | 59 | xj |
| Nipissing dist. | | |
| Misemikowish lake..... | 223 | xi |
| Sudbury dist. <i>See above, Algoma.</i> | | |
| Timagami lake..... | 56 | R C |
| Wanapitei lake, discovery..... | 434 | R C |
| Parry Sound district. | | |
| Cowper tp..... | 274 | v |
| mining, 1898..... | 88 | vii |
| 1899..... | 100 | ix |
| 1902..... | 116 | xii |
| 1904..... | 80 | A xiv |
| <i>See also Beatty and Wilcox mine.</i> | | |
| Report by Coleman..... | 259-262 | viii |
| Rainy River dist. | | |
| Lake of the Woods..... | 101 | vi |
| Andrew bay (native)..... | 105 | v |
| Andrew bay (native)..... | 99 | vi |
| Thunder Bay dist. | | |
| L. Superior, N. shore..... | 129, 131 | vi |
| Black bay..... | 85, 86 | ix |
| Black bay..... | 109 | x |
| Jackfish bay..... | 86 | x |
| Nipigon formation..... | 36 | R C |
| notes by Selwyn..... | 67 | R C |

| | Page. | Vol. |
|--|----------|-------|
| Copper.—<i>Con.</i> | | |
| ONTARIO.—<i>Con.</i> | | |
| Thunder Bay dist.—<i>Con.</i> | | |
| Lake Superior.— <i>Con.</i> | | |
| Otter cove, prospecting for..... | 115 A | xvi |
| report by Coleman..... | 120-174 | viii |
| Thunder bay, notes by Coleman..... | 145-150 | ix |
| Nipigon lake, prospecting for..... | 115 A | xvi |
| Round lake, notes by Coleman..... | 75 | v |
| Shebandowan lake..... | 80 | v |
| Upper Lakes, The, report by Coleman..... | 120-174 | viii |
| United States. | | |
| Lake Superior, Isle Royale..... | 92 | R C |
| paper by Irving..... | 82-88 | iii |
| Michigan, notes by Coleman..... | 144, 145 | ix |
| production, 1879..... | 371 | R C |
| Oregon, Grant co..... | 71 | B xiv |
| Production, 1879..... | 371 | R C |
| 1887..... | 213 | R C |
| 1888..... | 525 | R C |
| Wisconsin, Houghton co., pureness..... | 375 | R C |
| Keweenaw pt..... | 208 | v |
| Ontonagan river..... | 63 | iii |
| | 110 | v |

Copper, arsenide *See* Domeykite.

black *See* Melanconite.

carbonate. *See* Azurite.

glance (CHALCOCITE).

| | | |
|-----------------------------------|----------|-------|
| Bannockburn (near)..... | 42 A | xv |
| Determination of..... | 204, 212 | vi |
| Hardness of..... | 202 | vi |
| Hints on, to prospectors..... | 456 | R C |
| Occurrences of..... | 196 | ix |
| Parry Sound (near)..... | 37 | iv |
| Port Arthur region..... | 54, 58 | B xiv |
| Specific gravity of..... | 202 | vi |
| Vermilion mine, Sudbury dist..... | 161 | C xiv |

grey *See* Tetrahedrite.

nickel. *See* Niccolite.

ore. *See* Copper.

purple *See* Bornite.

Copper pyrites (CHALCOPYRITE).

| | | |
|-------------------------------------|----------|------------|
| Abitibi lake..... | 219, 220 | A xvi |
| Association of, with gold..... | 37 | iv |
| Bannockburn, near..... | 42 A | xv |
| Belmont tp..... | 48, 51 | iii |
| Blanche river, near..... | 25 | B xiv |
| Burgess, N. tp..... | 214 | vii |
| Christie tp..... | 121 | x |
| Cobalt dist..... | xi, 100, | 101 A xiii |
| Copper mt., B. C..... | 162 | C xiv |
| Cross lake..... | 25 | B xiv |
| Determination of..... | 203, 212 | vi |
| Dinorwic (near)..... | 125 | vii |
| Edgewood island, L. Huron..... | 109 | R C |
| Effect of, on apatite deposits..... | 442 | R C |
| Gapp mine, Penn..... | 146 | C xiv |
| Giroux lake..... | 53 | A xvi |
| Hardness of..... | 202 | vi |
| Hints on, to prospectors..... | 456 | R C |
| Hungerford tp..... | 133 | R C |
| Jackfish bay, L. Superior..... | 190 | v |
| Jackfish lake..... | 76, 77, | 80 v |
| Lacloche mtns..... | 59 | R C |
| Lake of the Woods..... | 20 | iii |
| Echo bay..... | 49 | v |
| Granite lake..... | 25 | iii |
| Shoal lake..... | 64 | v |

Copper pyrites.—*Con.*

| | | |
|---|------------------|--------|
| Larder Lake dist..... | 214, 215 | A xvi |
| Headquarters lake..... | 221 | xi |
| Mattagami river..... | 128 | iv |
| Michipicoten div., in auriferous veins..... | 11 Bull. | iii |
| Minnitaki lake..... | 57, 87 | v |
| Net lake, with mispickel..... | 173 | ix |
| Occurrences of..... | 196 | ix |
| Parry Sound, south of..... | 100 | iv |
| Port Arthur dist., silver veins..... | 54, 58 | B xiv |
| Three A mine..... | 28 | R C |
| Rainy Lake region..... | 73 | iv |
| Romid lake, E. of Moss tp..... | 75, 87, 118, 119 | v |
| Shebandowan lake..... | 80 | v |
| Silver islet..... | 86 | v |
| 55 B | xiv | |
| Spar island..... | 56 | B xiv |
| Speight's meridian line, E. of L. Superior..... | 203 | viii |
| Specific gravity of..... | 202 | vi |
| Sudbury dist..... | 90, 91 | i |
| 15, 116 | C xiv | |
| Bleazard tp., notes by Bell..... | 433 | R C |
| Creighton tp..... | 180 | A xvi |
| Creighton mine..... | 34, 111 | C xiv |
| description..... | 160, 161 | C xiv |
| Lady Evelyn lake..... | 25 | B xiv |
| Ramsay lake, near..... | 78 | C xiv |
| Vermilion mine..... | 179 | ii |
| Trout lake, Bowell tp..... | 201 | A xiii |
| 71 | C xiv | |
| Vancouver island, B. C..... | 117 | viii |
| Wanapitei lake, discovery..... | 434 | R C |
| White-rock lake..... | 165 | vii |

red *See* Cuprite.

yellow *See* Copper pyrites.

Copper Bay mine, BRUCE MINES, ALG. 94 ix

Cliff, SNIDER TP., ALG.

See also Copper Cliff nickel-copper mine.

| | | |
|--|------------|-------|
| Clay near..... | 241 | xii |
| for agriculture..... | 106 | C xiv |
| furnaces..... | 57 | B xv |
| Cobalt ores treated at, plant for..... | 32, 73 | B xiv |
| 8, 47 | A xv | |
| 11, 25 | A xvi | |
| ores for, description..... | 65 | A xvi |
| statistics, 1906..... | 12 | A xvi |
| photos..... | 87, 90, 91 | C xiv |
| Concentrating plant at..... | 37 | x |
| Growth of..... | 64 | xi |
| 141 | C xiv | |
| Hospital at, photo..... | 87 | C xiv |
| Library at, free..... | 36 | viii |
| Outcrop near, suggests a vein..... | 19 | C xiv |
| Quartz mined near, for flux..... | 121 | xii |
| 76, 122 | C xiv | |

Rocks at and near :

| | | |
|--------------------------|--------|-------|
| arkose..... | 92 | C xiv |
| diabase..... | 126 | C xiv |
| gneiss..... | 123 | C xiv |
| granite..... | 124 | C xiv |
| greywacke..... | 88, 89 | C xiv |
| Huronian..... | 128 | C xiv |
| pillow structure of..... | 52 | C xiv |
| quartzite..... | 127 | C xiv |

| | Page. | Vol. |
|--|-------------------|--------|
| Copper Cliff.—Con. | | |
| Smelter at | 19 | xii |
| photos..... | 272, 273 | xi |
| <i>See also</i> Ontario Smelting Works. | | |
| Striae near, direction.. | 101 c | xiv |
| Terrace near, altitude | 103 c | xiv |
| Cliff nickel-copper mine, Mc-Kim Tp., ALG. | | |
| Accidents at, 1893..... | 167-176 | iii |
| 1894..... | 206-213 | iv |
| 1895..... | 236, 239, 240 | v |
| 1897..... | 30, 31 | vii |
| 1898..... | 24, 25 | viii |
| 1899..... | 25 | ix |
| 1902..... | 45 | xii |
| 1903..... | 38, 39 | A xiii |
| 1906..... | 33 | A xvi |
| Blueite (?) in..... | 282 | xii |
| | 160 c | xiv |
| Copper in, proportion..... | 378 | R C |
| | 280 | xii |
| | 15, 137, 152 c | xiv |
| Discovery of | 3, 134, 169 c | xiv |
| Evidence <i>re</i> , before Roy. Com. | 68, 103, 104, 405 | R C |
| Galena in..... | 92 | i |
| | 282 | xii |
| | 161 c | xiv |
| Gangue minerals in..... | 163 c | xiv |
| Gold in, percentage | 153 c | xiv |
| History of | 285 | xii |
| and geology of..... | 258-261 | xii |
| Inspector's report on, 1891..... | 230 | i |
| 1892..... | 243 | ii |
| 1893..... | 182, 183 | iii |
| 1894..... | 240-244 | iv |
| 1895..... | 267-272 | v |
| 1896..... | 270-273 | vi |
| 1897..... | 94-97 | vii |
| 1898..... | 33, 34 | viii |
| 1899..... | 96 | ix |
| 1900..... | 121, 122 | x |
| 1901..... | 64, 277 | xi |
| 1902..... | 118 | xii |
| 1903..... | 84, 85 | A xiii |
| 1904..... | 70 | A xiv |
| Laccoliths near..... | 9 c | xiv |
| Map of..... | At end of Pt. | xii |
| Matte of, analysis..... | 283 | xii |
| | 152 c | xiv |
| Metallurgy at, paper by Mc-Arthur on methods of..... | 209-303 | xii |
| Millerite in..... | 281 | xii |
| | 59 B | xiv |
| | 159 c | xiv |
| Mining class at, 1893..... | 217 | iv |
| 1903..... | 54 | A xiii |
| Natural gas in..... | 260 | xii |
| Nickel in, percentage of..... | 15, 152 c | xiv |
| oxide from, analysis..... | 180 | ii |
| Notes on, by Bell..... | 24 | R C |
| Merritt..... | 90 | R C |
| Opened up..... | 137 c | xiv |
| Ores of, character..... | 278, 279 | xii |
| | 21 c | xiv |
| sent to England..... | 89 | i |
| | 236 | xii |

| | Page. | Vol. |
|--|------------|------|
| Copper Cliff nickel-copper mine.—Con. | | |
| Output of..... | 10 A | xiv |
| | 156 c | xiv |
| | 12 A | xv |
| Palladium in..... | 155, 162 c | xiv |
| Photos of..... | 16, 17 | vi |
| | 256, 257 | xii |
| Plans of..... | 256, 257 | xii |
| | 44-47 c | xiv |
| Platinum (sperrylite) in..... | 5 A | xiv |
| Railway to..... | 136 c | xiv |
| Roast heaps at, photo | 38 c | xiv |
| Rocks in and near..... | 295, 296 | xii |
| diabase dikes..... | 435 | R C |
| | 298 | xii |
| | 85 c | xiv |
| felsites, character | 290 | xii |
| gneiss..... | 293 | xii |
| | 83 c | xiv |
| granite..... | 14 c | xiv |
| greenstone..... | 75 | i |
| | 81 c | xiv |
| Laurentian..... | 10 c | xiv |
| nickel-bearing | 13 c | xiv |
| off-set deposits..... | 20, 50 c | xiv |
| notes by Coleman | 40-48 c | xiv |
| petrographical notes..... | 292 | xii |
| | 114 c | xiv |
| quartz-syenite..... | 434 | R C |
| Section of..... | 42 c | xiv |
| Shaft of, angle and depth..... | 381 | R C |
| Silver in, percentage of..... | 153 c | xiv |
| Smelter at, capacity..... | 435 | R C |
| photo..... | 39, 108 c | xiv |
| <i>See also</i> Copper Cliff. | | |
| Sulphides of..... | 277 | xii |
| percentage | 151, 153 c | xiv |
| Cliff No. 2 mine, COPPER CLIFF, ALG. | | |
| Notes on, 1905..... | 64 A | xv |
| 1906..... | 64 A | xv |
| Output, 1906..... | 12 A | xvi |
| creek, MAMAINSE PEN., L. SUPERIOR. | | |
| Copper mine on..... | 72 | iii |
| notes and photo..... | 73-75 | iii |
| Creek Mining Co. | | |
| Work by, Mamainse pt., 1894.... | 240 | iv |
| King Mining Co. | | |
| Capital and date of charter..... | 9 | ix |
| lake, S. OF SHEBANDOWAN LAKE, TH. B. D. | | |
| Description of, by Blue..... | 128 | v |
| Minor refs. to..... | 127, 130 | v |
| Rocks on..... | 81 | v |
| Mining and Smelting Co. | | |
| Bruce mines worked by..... | 12, 68 A | xv |
| | 16, 70 A | xvi |
| Capital and date of charter..... | 25 A | xvi |
| mt., ILLECILLEWAET DIST., R.C. | | |
| Sperrylite in..... | 162 c | xiv |
| pt., SAND BAY, L. SUPERIOR. | | |
| Rocks at..... | 69 | iii |
| Queen mine, BISBEE, ARIZONA. | | |
| Azurite from..... | 212 | vi |
| Queen mine, MORIN TP., NIP. | | |
| Notes on, 1903..... | 80, 81 A | xiii |
| Photos of..... | 96, 97 A | xiii |

| | Page. | Vol. | | Page. | Vol. |
|---|----------|------|--|-------------|------|
| Copper Queen Mining Co. | | | Cornell University. | | |
| Capital and date of charter..... | 8 | xii | Notes, by Mather, on technical | | |
| Work by..... | 80 A | xiii | teaching at..... | 503 | R C |
| Copperas harbour, NEAR KEWEENAW | | | Corner lake, NEAR WHISKEY LAKE, | | |
| PT., L. SUPERIOR, U. S. | 63 | iii | ALG. | | |
| <i>Coptis trifolia.</i> | | | Quartz copper veins on..... | 67 A | xiv |
| Abitibi Lake dist..... | 241 A | xiv | photo.... | 63 A | xiv |
| Mattagami valley..... | 150 A | xv | Cornfield copper mine, FOLEY TP., | | |
| Copus, S. T. | 117, 119 | i | P. S. D. | | |
| | 28 | v | Notes on, by Coleman..... | 168 | ix |
| Cora gold mine, MICHIPICOTEN DIV., | | | Cornhill, James | | |
| ALG. | 80 | xii | Brick-yard of, Chatham, notes | | |
| Coracite. | | | and photo.... | 72 B | xv |
| Mamainse pt..... | 194 | ii | Corniferous formation (DEVONIAN). | | |
| analysis..... | 197 | ix | Brant co..... | 33 B | xiii |
| Coral portage, ABITIBI RIVER | 138 A | xiii | Bruce co..... | 35 B | xiii |
| <i>Corallorhiza innata.</i> | | | Composition of..... | 99 A | xiv |
| Mattagami valley..... | 150 A | xv | Description of..... | 25 B | xiii |
| Corbeau (Corby) pt., BATCHAWANA | | | Distribution of..... | 25 B | xiii |
| BAY, L. SUPERIOR. | | | notes by Bell..... | 47, 48 | R C |
| Fishing industry at..... | 128 | viii | Elgin co..... | 41 B | xiii |
| Cordick, Samuel | | | Essex co., Anderdon tp., paper | | |
| Foreman, Amy mica mine..... | 250 | ii | by Nattress..... | 123-127 | xi |
| Canton apatite mine.. | 251 | ii | Fredonia, N. Y., thickness..... | 130 | i |
| Coe apatite mine..... | 195 | iii | Gas borings in, various..... | 129, 133 | i |
| | 276 | v | Haldimand co..... | 53 B | xiii |
| Handlan mica mine.... | 129 | xii | Huron co..... | 66 B | xiii |
| | 88 A | xvi | James Bay dist..... | 205 | v |
| Manager, Gould Lake mica mine. | 133 | x | | 32 B | xiii |
| Cordova Exploration Co.* | | | Kent co., E. Tilbury tp., thick- | | |
| Belmont gold mine worked by .. | 88 | vii | ness..... | 103 A | xvi |
| | 22, 40 | viii | Middlesex co..... | 80 B | xiii |
| | 92 | ix | Norfolk co..... | 88 B | xiii |
| | 56, 57 | xii | Notes on, by Park..... | 143 | xii |
| Belmont Gold Mg. Co. floated | | | Oil in, decreasing..... | 23 A | xvi |
| by..... | 14, 111 | xii | Oilfields, thickness in..... | 96, 99 A | xiv |
| <i>See also Belmont g. m.</i> | | | Oxford co..... | 91 B | xiii |
| Capital and date of charter..... | 10 | x | Woodstock..... | 142 | xii |
| gold mine. See Belmont g. m. | | | Perth co..... | 95 B | xiii |
| Cork pine. See Pine, white | | | Position of, in Devonian..... | 2 | R C |
| Corkill, E. T. | | | Tar in..... | 543 | R C |
| Inspector of mines..... | 33 A | xvi | Welland co..... | 116, 118 B | xiii |
| Paper in preparation by, on mica | | | Port Colborne..... | 34, 35 | xi |
| of Canada..... | 91 A | xiii | Cornucopia gold mine, L. OF THE | | |
| Reports by, on:— | | | WOODS. | | |
| Accident at Massey Station | | | Notes on, 1896..... | 50, 107 | vi |
| mine..... | 32, 33 A | xv | 1897..... | 54, 120 | vii |
| Mines of Ontario, 1906..... | 55-82 A | xvi | 1898..... | 67, 68, 276 | viii |
| ref. to..... | 2 A | xvi | idle..... | 280 | viii |
| Petroleum and natural gas.. | 88-117 A | xiv | Cornus canadense. | | |
| ref. to..... | 21 A | xiv | Abitibi Lake dist..... | 241 A | xiv |
| | 109 A | xv | Mattagami valley..... | 150 A | xv |
| | 8 A | xv | " paniculata. | | |
| Work by, 1905..... | | | Abitibi Lake dist..... | 241 A | xiv |
| Corkscrew island, L. OF THE WOODS. | | | Mattagami valley..... | 150 A | xv |
| Farming on..... | 105 | vi | " stolonifera. | | |
| Corliss, C. V. | | | Abitibi Lake dist.. | 241 A | xiv |
| Manager, North Star mine..... | 72 A | xiv | Mattagami valley..... | 150 A | xv |
| | 36 C | xiv | Cornwall, CORNWALL TP., STORMONT | | |
| | 65 A | xv | CO. | | |
| | 67 A | xvi | Fossils from..... | 224 | x |
| Corn. See Indian corn. | | | dolphin..... | 217, 219 | x |
| Corneille, C. C. | 83 | viii | Post-office at, building stone of . | 96 | i |
| Cornell, James | | | Pottery works at..... | 29 | xii |
| Pottery clay worked by, Thed- | | | Cornwall, LEBANON CO., PENN. | | |
| ford..... | 155 | xii | Iron mine at..... | 20 | |
| | 70 B | xiii | | | |

* Misprinted Cardona.

| | Page. | Vol. |
|---|-------------------|------|
| Cornwall co., ENGLAND. | | |
| Arsenic mining in | 60, 61 | iii |
| production | 101 | xi |
| Copper in | 173 | i |
| Granites of | 540 | R C |
| tin-bearing | 162 A | xv |
| Mining royalties | 31-35 | i |
| Night-schools at | 509 | R C |
| Tin in | 34, 35, 173 | i |
| for salting in Byron tp. | 139 | viii |
| tp., STORMONT CO. | | |
| Marine deposits in | 219 | x |
| “ Corona ” ss. | | |
| Mica covering fitted to boilers of. | 32 | v |
| Corona Mining Co. | | |
| Capital and date of charter | 9 | ix |
| Licence to | 115 | x |
| Work by | 140 | x |
| Work by | 114 | ix |
| Coronado Gold Mg. Co. | | |
| Capital and date of charter | 8 | vii |
| See also Sentinel gold mine. | | |
| Coronation Gold Mining Co. | | |
| Capital and date of charter | 37 A | xiii |
| Operating Burley mine | 60 A | xiii |
| gulf, MACK. | | |
| Archæan rocks southward from .. | 246 | v |
| Coroners' inquests. | | |
| On deaths from mining accidents, | | |
| notes | 176, 177 | iii |
| See also Accidents. | | |
| Corrigan lake, STURGEON RIVER, TH. | | |
| B. D. | | |
| Altitude and length of | 137 A | xvi |
| Rocks on and near | 142, 147 A | xvi |
| Sand plains near | 148 A | xvi |
| Corson, Carroll | 70, 75 | ix |
| Cort, Henry | | |
| Puddling furnace of xxi, 359, 360 | | R C |
| Corundum. | | |
| Act governing disposal of lands | | |
| containing | 248, 249 | viii |
| Analysis of, and of rocks bearing. | | |
| 238, 239 | | vii |
| Blue mountains | 193 | xi |
| Burgess tps. | 190, 194 | ii |
| Burma | 62 | vi |
| 213 | | vii |
| notes by Miller and Hol- | | |
| land | 229-233, 241, 242 | viii |
| Concentration of | 239-243 | vii |
| Crushing curves of, plates shew- | | |
| ing | 240, 241 | vii |
| Hardness of | 535 | R C |
| 201, 203 | | vi |
| 214 | | vii |
| Hastings co., Carlow tp. | 84 A | xvi |
| mining | 82 A | xvi |
| notes | 250 | vii |
| York river | 34 A | xvi |
| Industry of, 1899 | 19-21 | ix |
| 1900 | 25, 26 | x |
| 1901 | 37, 38 | xi |
| 1902 | 37, 135, 136 | xii |
| 1903 | 19-21, 88-90 A | xiii |
| 1904 | 74, 75 A | xiv |
| 1905 | 97-99 A | xv |
| 1906 | 21 A | xvi |

Corundum.—Con.

| | Page | Vol. |
|--|--------------------|------|
| Methuen tp | 204, 205 | xi |
| Notes on, by Goodwin | 217 | vi |
| Papers and reports on, by:— | | |
| Blue | 61-66 | vi |
| 211-249 | | viii |
| De Kalb | 240-250 | vii |
| Miller | 207-230 | vii |
| 205-240 | | viii |
| Production, 1900 | 11, 12 | x |
| 1901 | 13, 38 | xi |
| 1902 | 12, 13, 37 | xii |
| 1903 | 3, 4, 19-21 A | xiii |
| 1904 | 1, 3, 18, 19 A | xiv |
| 1905 | 1, 19 A | xv |
| 1906 | 3, 4, 6, 21 A | xvi |
| Photos of | 216, 217, 232, 233 | viii |
| Renfrew co. | 207-230 | vii |
| 205, 222-224 | | viii |
| Craigmont, notes and | | |
| photos of plant | 21, 84 A | xvi |
| map showing | 207, 208 | vii |
| mining | 82 A | xvi |
| Specific gravity of | 203 | vi |
| United States:— | | |
| Georgia and N. Carolina. | 19 | ix |
| production, 1888 | 525 | R C |
| Hill mine, NEAR FRANKLIN, | | |
| N. CAROLINA. | | |
| Production of, 1900 | 38 | xi |
| Refiners, Ltd. | | |
| Formation and objects of | 21, 89 A | xiii |
| Non-producing | 19 A | xiv |
| <i>Corrus americanus.</i> See Crow. | | |
| “ <i>corax-principalis.</i> See Raven, | | |
| northern | | |
| Cory, E. N. | 103 | viii |
| 115 | | ix |
| <i>Corydalis aurca.</i> | | |
| Abitibi dist. | 241 A | xiv |
| “ <i>glauca.</i> | | |
| Abitibi dist. | 241 A | xiv |
| Mattagami valley | 150 A | xv |
| Coryell, B. C. | 95 | ix |
| <i>Corylus americana.</i> See Hazel. | | |
| “ <i>ro trata.</i> | | |
| Abitibi dist. | 242 A | xiv |
| <i>Corythuca arcuata.</i> See Bugs, lace | | |
| Cosala, LINALOA STATE, MEXICO. | | |
| Cobalt minerals in | 71 B | xiv |
| Cossette, Henry | 52 | x |
| Costa Rica. | | |
| Nickel coinage in | 161 | ii |
| Coste, Eugene | | |
| Analysis of iron ore taken by, in | | |
| Hutton tp. | 73 A | xvi |
| Map made by, of Deloro g. m., | | |
| ref. to | 59 | vi |
| Notes by, on:— | | |
| boring for gas and oil by his Co. | 133 | i |
| Essex co. | 114 A | xiv |
| Mimico | 138, 139 | i |
| oil and gas, Kent co. | 92, 102 A | xvi |
| origin | 92, 96 A | xiv |
| Welland co. | 104 A | xi |
| Oil found by, in Oriskany forma- | | |
| tion | 114 A | xiv |
| Paper by, on natural gas, ref. to. | 193 | ix |
| 88 A | | xiv |

| | Page. | Vol. | | Page. | Vol. |
|--|-----------------|------|---|--------------|------|
| Coste, Eugene—Con. | | | Cournager, N. | 140 | x |
| President, Ontario Natural Gas Co. | 117 | i | Coursing stone. | | |
| Promoter, Provincial Natural Gas | | | Statistics of. <i>See</i> Building-stone. | | |
| and Fuel Co. | 132 | i | Courtis, W. M. | 145 | vi |
| Report by, L. of the Woods, ex- | | | | 52 B | xiv |
| tract. | 20 | iii | Courtright, Moore tp., Lambton | | |
| ref. to. | 37, 68 | iv | Co. | | |
| Natural Gas and Petroleum. | | | Boring at, for water. | 59 | i |
| | 115-118 A | xv | Natural gas at | 151, 153 | rc |
| Thickness of drift in Kent co. | | | Salt at | 55, 182, 183 | rc |
| given by | 102 A | xvi | notes by Carter | 191 | rc |
| Views of, on:— | | | record for boring for | 186 | rc |
| occurrence of ores in Arch- | | | Section from, to Hamilton. | 100, 101 A | xiv |
| ean rocks | 56-58 | ii | Salt Co. | | |
| origin of oil and gas | 92, 96 A | xiv | Notes on, by J. Carter | 191 | rc |
| iron ores, Hastings | | | Coutlee, Dr. H. N. | | |
| dist. | 41 | ii | Gold prospecting by, Oso tp. | 265 | v |
| Work by, for United Gas and Oil | | | Couture, Joseph | 34, 35 A | xvi |
| Co. | 43 | xi | lake, NEAR STURGEON LAKE, | | |
| Cotta, H. Von | | | R. R. D. AND TH. B. D. | | |
| Notes by, on Joachimsthal dist., | | | Gold mining on and near | 86, 87 | xii |
| Bavaria | 62 B | xiv | | 60 A | xvi |
| Cotter, Alexander | 41 | ix | <i>See also</i> Jack Lake G. Mg. Co. | | |
| | 16 | xii | St. Anthony Reef g. m. | | |
| Cotton-boll weevil. | | | Steele's g. m. | | |
| Arsenic for extermination of. | 116 | xi | Map of | 96, 97 | xii |
| Cottrell, R. | 140 | x | Covellite. | | |
| <i>Cottus uncinatus.</i> | | | Rainy Lake dist. | 197 | ix |
| Greens creek, near Ottawa | 224 | x | Cow parsnips. | | |
| Couchiching falls, ABITIBI RIVER. | | | Night-hawk lake | 123 A | xiii |
| Description of river near | 185, 186 A | xiv | Cowain, E. J. | 76 A | xvi |
| Height of | 235 A | xiv | Cowan, Alexander | | |
| Minor ref. to | 187 | xii | Iron mining by, N. Crosby tp. | 137 | rc |
| Photos of | 144, 145 A | xiii | Report by, on Playfair iron mine. | 39 | vi |
| | 234 A | xiv | John | | |
| Quartz-porphry near | 210, 211 A | xiv | Pyrites mining by, Elizabeth- | | |
| Soil near | 226 A | xiv | town tp. | 152 A | xvi |
| analysis | 246 A | xiv | William | 124, 125 | vii |
| for farming | 200 A | xiv | and Steele. | | |
| Water-power at | 208, 209, 235 A | xiv | Apatite mining by, Storrington | | |
| falls, RAINY RIVER. | | | tp. | 170 | rc |
| Fort near, historical notes | 162 | v | Cowcaw, H. | 167 | iii |
| formation. | | | Cowdry, N. H. | 156 | xii |
| Composition of | 151 | vii | Cowen, F. M. | 102 | vii |
| Description of | 272 A | xiv | | 103 | viii |
| Manitou lake | 84 | vi | Cowham, W. F. | 33 | xi |
| Petrography of | 144, 145 | xi | | 149 A | xiv |
| Rainy Lake region: | | | Cowie, J. | 103 | viii |
| folds in, diagram | 47, 48 | iv | Cowper tp., PARRY SOUND DIST. | | |
| Goose island, photo. | 77 | iv | Copper mining in, 1898. | 88 | vii |
| like hillelinta. | 82 | v | | 1899. | 100 |
| notes by Coleman. | 45, 46 | iv | | 1902. | 116 |
| petrography | 81-83 | iv | <i>See also</i> Beatty and Wil- | | |
| Seine River dist. | 74 | vi | cox mine. | | |
| lake, ONTARIO CO. | | | Gold mining in, 1898. | 88 | vii |
| Limestone on | 89 B | xiii | Cox, E. Strachan | | |
| Wolfram from | 233 | vii | Gold mining by, Michipicoten | | |
| Wolframite from | 212 | ix | div. | 103 | viii |
| Coughlin, R. | 115 | ix | Part owner, Ophir gold mine | | |
| | 140 | x | (Alg.) | 90 | ix |
| Coulange lake, OTTAWA RIVER. | | | Thomas | | |
| Marine fossils on | 216 | x | Data supplied by, re drilling at | | |
| Coulthard, R. W. | | | Guelph. | 151, 152 | xii |
| Reference to surveys by, Abitibi | | | Notes by, on well sunk at St. | | |
| river. | 202, 205 A | xiv | Marys. | 123 B | xiii |
| Work by, 1898. | 121, 135 | viii | Eckley B. | 41 | i |
| Council Bluffs, POTTIOWATTAMIE CO., | | | | | |
| IOWA. | | | | | |
| Brick paving at | 113 | iii | | | |

| | Page. | Vol. | | Page. | Vol. |
|---|------------|------|--|------------|------|
| Cozens, Joseph | | | Craig Mining Co. | | |
| Antimony found by, Garden river. | 30 | R C | Capital and date of charter..... | 25 A | xiv |
| Granite location of, near C. Gar- | | | Work by, 1904..... | 76 A | xiv |
| gantua..... | 67 | iii | 1905..... | 89 A | xv |
| Copper mine of, Michipicoten is- | | | tp., ALG. | | |
| land :— | | | Galena in..... | 92 | i |
| emptied, 1898..... | 143 | viii | Craigmont, RAGLAN TP., RENFREW | | |
| idle, 1894..... | 239 | iv | co. | | |
| notes..... | 60 | R C | Corundum at, works..... | 19 A | xv |
| ref. to..... | 39 | R C | photo..... | 84 A | xvi |
| Surveys by, Galbraith tp., ref. to. | 40 | iii | See also Canada Corundum Co. | | |
| Work by, 1898, ref. to..... | 160 | xii | Crystalline limestone near, photo. | 88 A | xvi |
| Crab apples. | | | Minerals collected at..... | 43 A | xv |
| Rainy river, attempt to grow.... | 165 | v | Crain, George | | |
| lake, ANSTRUTHER TP., PETERBO- | | | Brick works of, Beamsville, notes | | |
| ROUGH CO. | | | and photos..... | 78 B | xv |
| Pegmatite dikes near..... | 215 | viii | Cramahe tp., NORTHUMBERLAND CO. | | |
| Crackerjack Gold Mg. Co. | | | Beach in. See Colborne. | | |
| Capital and date of charter..... | 9 | ix | Cramp, Charles D. | 23 | xii |
| Work by, 1899..... | 63 | ix | William | 23 | xii |
| Cracknel, A. B. | 102 | vii | Steel Co. | | |
| | 103 | viii | Analysis of lithographic stone | | |
| Craddock, Ross S. | | | from quarry of..... | 110 B | xiii |
| Gold mining by, near Missinaibi. | 72 | xi | Capital and officers of..... | 23 | xii |
| Cradle creek, MAGPIE RIVER, L. Su- | | | Furnace of, description..... | 23, 24 | xii |
| PERIOR. | | | Iron mining by, Lavant tp..... | 262 | xi |
| Minor refs. to..... | 294, 295 A | xiv | Crantage, George | 359 | R C |
| Rocks on..... | 344 A | xiv | Thomas | 359 | R C |
| gneiss agglomerate, photo. | 345 A | xiv | Cranberry. | | |
| Craig, B. A. C. | | | Abitibi dist..... | 241, 253 A | xiv |
| See also Craig corundum mine. | | | Black and Blanche rivers..... | 188 | xii |
| Agreement by, with Govt. for cor- | | | Larder lake..... | 220 | xi |
| undum lands..... | 249 | viii | Michipicoten div..... | 189 | vii |
| Director, Canada Corundum Co. | 20 | ix | Mattagami valley..... | 191 A | xiv |
| Notes by, on producing alumi- | 130 | x | Rainy Lake dist..... | 96 | iv |
| nium..... | 19 A | xiii | high-bush | | |
| John (MINER) | 31 | vii | Atikokan river..... | 144 | v |
| John (M.P.P.) | 212 | viii | Mattagami valley..... | 150 A | xv |
| W. Dixon | | | 150 A | xv | |
| Analysis by, of limestone, Tay tp. | 110 B | xiii | Montreal river, L. Superior..... | 200 | viii |
| iron ores, Mayo tp. | 97 A | xv | iron mine, N. CAROLINA. | | |
| W. J. | 99 | vii | Treatment of ore at..... | 328, 339 | xii |
| | 88 | ix | lake, N. CAROLINA. See Cran- | | |
| | 251, 255 | xi | berry iron mine | | |
| and Hamilton pyrites claim, | | | Crane, Walter | | |
| CREIGHTON TP., ALG. | | | Magnetic permeability of metals | | |
| Notes on, by Fraleck..... | 180 A | xvi | worked out by..... | 324 | xii |
| corundum mine, RAGLAN TP., | | | Hot blast applied by, to making | | |
| RENFREW CO. | | | of pig iron..... | 366 | R C |
| Mining class at, 1901..... | 62 | xi | white | | |
| 1905..... | 42 A | xv | Abitibi dist..... | 243 A | xiv |
| Notes on, 1901..... | 37, 294 | xi | <i>Cranella logani.</i> | | |
| 1902..... | 37, 135 | xii | Ottawa..... | 225 | x |
| Photos of..... | 288, 289 | xi | Crank, Orson | 236, 239 | v |
| gold mine, TUDOR TP., HAST- | | | Cranell, L. | 52 | viii |
| INGS CO. | | | | 21 | ix |
| Accident at..... | 30 | vii | Cranston, J. and G. | 118 B | xv |
| Depth of, 1901..... | 198 | xi | <i>Cratrypus coccinea. See Hawthorn.</i> | | |
| Minor ref. to..... | 111 | R C | " <i>crus-galli.</i> | | |
| | 4 A | xv | Abitibi dist..... | 242 A | xiv |
| Notes on, 1898..... | 92 | vii | Crawford, A. A. | 99 A | xvi |
| 1903..... | 93 A | xiii | Horace | | |
| 1904..... | 76 A | xiv | Gold prospecting by, Anzhukum- | | |
| 1905..... | 89 A | xv | ming lake..... | 85 | vi |
| Producing, 1905..... | 4, 88 A | xv | President, Rand Gold Mg. Co. ... | 124 | vii |
| 1906..... | 6 A | xvi | See also Crawford gold mine. | | |
| | | | Middleton | | |
| | | | Belmont gold mine worked by..... | 47, 48 | iii |

| | Page. | Vol. | | Page | Vol. |
|--|-----------------|------|---|---------------|------|
| Crawford Bros. | | | Creighton mine, SNIDER TP., ALG. | | |
| Brick making by, Hamilton..... | 29 | xii | Accidents in, 1901..... | 51 | xi |
| gold mine, ANZHEKUMMING | 106 B | xv | 1902..... | 44, 45, 48 | xii |
| LAKE, R. R. D. | | | 1904..... | 28 A | xiv |
| Fissure vein in..... | 116 | vi | 1905..... | 30 A | xv |
| Rocks of, diorite..... | 39 | iv | Copper in, proportion..... | 280 | xii |
| milling process | 224 | i | 137, 152, 155 C | xiv | |
| See also Crawford, Middleton | | | Discovery of..... | 284 | xii |
| sand pit, HAMILTON. | | | 134, 135, 169 C | xiv | |
| Section of..... | 228 A | xiii | Fault hill S. of, photo..... | 13 C | xiv |
| tp., NIP. | | | Fluorite crystals in..... | 284 | xii |
| Peat in, analysis..... | 128 A | xv | Flux for, from Frood mine..... | 138 C | xiv |
| Soil and timber in..... | 120, 136, 141 A | xv | Gold in, percentage of..... | 153 C | xiv |
| Crayons. | | | Hypersthene in..... | 18 C | xiv |
| Talc for..... | 101 | iii | Idle, 1893..... | 3 | iv |
| Cray-fish lake, MICHIPICOTEN DIV. | | | Mining class at, 1904..... | 41 A | xiv |
| 292, 344 A | xiv | | Nickel in and near..... | 3 C | xiv |
| Crayfish river, DOG RIVER, L. SUPERIOR. | | | mining, 1901..... | 21 | xi |
| Character of..... | 292 A | xiv | percentage..... | 280 | xii |
| Drainage area of..... | 285 A | xiv | 137, 152 C | xiv | |
| Rocks on and near..... | 314, 348 A | xiv | Notes on, by Blue..... | 45-47 | iii |
| Crean Hill mine. See Kream Hill mine. | | | Coleman..... | 33-36 C | xiv |
| Creasor, A. D. | 141 A | xiv | 1892..... | 9, 236 | ii |
| Credit Forks, CALEDON TP., PEEL CO. | | | 1894..... | 233 | iv |
| Building-stone at..... | 43, 73, 74, 79 | R C | 1899..... | 99, 100 | ix |
| quarrying, limestone..... | 110, 111 | ix | 1901..... | 64, 279, 280 | xi |
| sandstone..... | 96 | i | 1902..... | 120, 243, 244 | xii |
| Clay at..... | 78, 79 | R C | 1903..... | 85, 86 A | xiii |
| Saugeen..... | 167 | i | 1904..... | 69, 70 A | xiv |
| Celestite at..... | 196 | ix | 1905..... | 11, 64 A | xv |
| Escarpment at, section of..... | 73 | R C | 1906..... | 63, 64 A | xvi |
| Forks Mfg. and Mfg. Co. | | | Open pit of, photo..... | 34 C | xiv |
| Capital and date of charter..... | 7 | vi | plan..... | 35 C | xiv |
| 8 | vii | | Ores of, quality..... | 6 A | xiii |
| Work by, 1899..... | 110, 111 | ix | 6, 11 A | xiv | |
| Forks Quarry Co. See Credit Valley Quarry Co. | | | won by quarrying..... | 7 A | xiii |
| river, PEEL CO. | | | silica required for fluxing..... | 66 A | xvi |
| Cambro-Silurian on..... | 39 B | xiii | Orthoclase crystals in..... | 284 | xii |
| Celestite from valley of..... | 190 | ii | Output of, capabilities..... | 9 A | xv |
| Hudson River formation on..... | 126 B | xiii | largest in world..... | 145 C | xiv |
| Iroquois beach crossing..... | 229 A | xiii | 1902..... | 17 | xii |
| Limestone on..... | 95 B | xiii | 1904..... | 10 A | xiv |
| quarrying..... | 111 | ix | 139 C | xiv | |
| Sandstone on, quarrying..... | 99 | i | to 1904..... | 156 C | xiv |
| Shales of, notes on..... | 7 B | xv | 1905..... | 12 A | xv |
| Water-power on..... | 13 Bull. | iii | 1906..... | 14 A | xvi |
| Valley Quarry Co. | 28 | xii | Pentlandite in..... | 281 | xii |
| Crediton, STEPHEN TP., HURON CO. | | | 16, 159 C | xiv | |
| Brick-yards at..... | 71 B | xv | Photos of..... | 272, 273 | xi |
| analysis of clay..... | 14, 17 B | xv | 240, 241, 272, 273 | xii | |
| photos..... | 46, 50 B | xv | 70 A | xiv | |
| Cree Indians. | | | 34, 113 C | xiv | |
| Condition of, 1903..... | 179 A | xiii | Plan of..... | 243 | xii |
| Creelman, Frank | | | Platinum metals in..... | 153 C | xiv |
| tp., NIP. | | | Railway to..... | 136 C | xiv |
| Map of..... | 321 | xii | Rocks in and near..... | 244, 245 | xii |
| Creeper, brown | | | breccia, photo..... | 12 C | xiv |
| Abitibi dist..... | 243 A | xiv | diabase..... | 297 | xii |
| Creighton, A. H. | | | 43, 85, 125, 126 C | xiv | |
| Gold mining by, Maniton Lake | | | faulting of..... | 37 C | xiv |
| dist..... | 63 | ix | gabbro..... | 294 | xii |
| Walter | 39, 41 A | xiii | glaciated..... | 101 C | xiv |
| | | | gneiss..... | 293 | xii |
| | | | 81, 123 C | xiv | |
| | | | gossan..... | 163 C | xiv |
| | | | granite..... | 83 C | xiv |
| | | | Laurentian..... | 10 C | xiv |
| | | | marginal deposits..... | 20 C | xiv |

| | Page. | Vol. | | Page. | Vol. |
|---|--------------|------|---|----------|------|
| Creighton mine. — <i>Con.</i> | | | Cretzchmann, Edward | 58 | xii |
| Rocks in and near.— <i>Con.</i> | | | Creusot, Le, SAONE-ET-LOIRE, FRANCE. | | |
| nickel-bearing..... | 11 c | xiv | Foundry at, notes on..... | 176 c | xiv |
| norite..... | 36, 40 c | xiv | molybdenum used in..... | 46 | xi |
| analysis..... | 116, 117 c | xiv | Crieff, PERTSHIRE, SCOTLAND. | 218 | i |
| petrography..... | 111-114 c | xiv | Crimea, The, RUSSIA. | | |
| Silver in, percentage of..... | 153 c | xiv | War in, affects price of farm pro- | | |
| Sulphides in "..... | 151 c | xiv | duce..... | 326 | R C |
| Gold Mining Co. | | | Crinoids. | | |
| <i>See also</i> Creighton mine. | | | Abitibi river..... | 187 | viii |
| Capital and date of charter..... | 8 | vii | Port Colborne, near..... | 36 | xi |
| Work by, Creighton tp..... | 45, 46 | iii | Thedford..... | 69 B | xiii |
| tp., ALGOMA DIST. | | | | 8, 75 B | xv |
| Clay plain in..... | 93 c | xiv | | 51 | ix |
| Copper in..... | 433 | R C | Crocker, W. H. | | |
| Galena in..... | 92 | i | cape, BRUCE CO. | | |
| argenteriferous..... | 198 | ix | Hudson River formation at..... | 35 B | xiii |
| ..... | 29 | R C | Croesus Mining Co. | | |
| Gold in..... | 59, 92, 225 | i | Capital and date of charter..... | 29 A | xvi |
| mining, 1892..... | 236 | ii | Croft, E. | 109 | xii |
| 1894..... | 233 | iv | Mr. | | |
| 1895..... | 261 | v | Analysis by, of water from | | |
| Iron pyrites in..... | 93 c | xiv | London and Tilsonburg..... | 60, 62 | i |
| notes by Fraser..... | 180 A | xvi | tp., P. S. D. | | |
| Lake Superior Power Co. work- | | | Limestone in..... | 94 B | xiii |
| ing in..... | 17, 19 | xii | Croker-Parks Oil Co. | | |
| Nickel mining in..... | 94 | vii | Capital and date of charter..... | 8 | xii |
| <i>See also</i> Gertrude nickel m. | | | Cronan, James. | 70 A | xiii |
| Rocks in, greenstone..... | 75 | i | | 26, 27 A | xiv |
| nickeliferous, notes by | | | Cronk, Coleman | 54 A | xiii |
| Coleman..... | 37-39 c | xiv | Cronmiller, Henry | | |
| norite..... | 242 | xii | Boring by, for oil, Port Colborne. | 129 | i |
| ..... | 32, 33, 81 c | xiv | Cronstedt—? | | |
| Silver in..... | 29, 59 | R C | Nickel discovered by..... | 163 c | xiv |
| Waterpower in..... | 10 A | xiv | Crooked lake, MICHIGICOTEN DIV., | | |
| ..... | 13 A | xv | ALG. | | |
| <i>See also</i> Macpherson falls. | | | Gold reported on..... | 188 | vii |
| •Zinc-blende in..... | 92 | i | —pine lake, ATIKOKAN RIVER, | | |
| <i>Crepidophyllum archiasi</i> | | | R. R. D. | | |
| Anderdon tp..... | 124 | xi | Description of, by Blue..... | 140 | v |
| Kwataboahagan river..... | 181 A | xiii | Gold mining near..... | 57 A | xvi |
| "colligation. | | | Minor ref. to..... | 73 | v |
| Cayuga, N. tp..... | 146 | xii | rapid, ABITIBI RIVER. | | |
| Villanova..... | 143 | xii | Country near, character..... | 201 A | xiv |
| Crescent gold mine, NEAR MALONE, | | | river, DISORWIC LAKE, R.R. D. | | |
| MARMORA TP. | | | Navigation on, difficult..... | 121 | vii |
| Idle, 1894..... | 236 | iv | Crooks tp., TH. B. D. | | |
| Inspector's report on, 1891..... | 233 | i | Amygdaloidal rock in..... | 147, 179 | ix |
| 1892..... | 238 | ii | Copper mine in, notes by Cole- | | |
| Mill at, photo..... | 52 | iii | man..... | 146 | ix |
| Notes on, by Blue..... | 52, 53 | iii | Crookston, HUNTINGTON TP., HAST- | | |
| Gold Mg. Co. | | | INGS CO. | | |
| <i>See also</i> Crescent gold mine. | | | Cement mill at, projected..... | 17 | x |
| Iron mining by, Marmora tp.... | 237 | i | Limestone (and marble) at :— | | |
| Testing mispickel ore..... | 263 | v | analysis..... | 61 B | xiii |
| Nickel Mining Co. | | | character..... | 24 B | xiii |
| Capital and date of charter..... | 8 | vii | for power-plant at Niagara Falls. | 4 B | xiii |
| Steel Works, PITTSBURG. | | | quarried..... | 80 | R C |
| Analysis by, of graphite, Broug- |  |  | ..... | 59 B | xiii |
| ham tp..... | 24 | x | 1897..... | 99 | vii |
| Steel output of, 1893..... | 118 | ii | 1898..... | 48, 289 | viii |
| Wages paid by, statistics..... | 370 | R C | Marl from, analysis..... | 66 B | xiii |
| Cressey, E. W. | 65 | xii | Crookston, POLK CO., MINN. | 166 | v |
| ..... | 48 A | xiii | Point Ann Co. | | |
| Cressy, MARYSBURG TP., PRINCE | | | Officers of, work by, 1897..... | 99 | vii |
| EDWARD CO. | | | Crosby iron mine. <i>See</i> Bygrove | | |
| Terrace near..... | 240 A | xiii | iron mine. | | |
| Cretaceous system. | | | lake, N. CROSBY TP., LEEDS CO. | | |
| Definition of..... | 531 | R C | Iron ore on..... | 49 | ii |

| | Page. | Vol. | | Page. | Vol. |
|--|-------------------------|--------|---|----------------|--------|
| Crosby tps., LEEDS CO. | | | Cross lake, Nip.—Con. | | |
| Apatite in..... | 172 | R C | Iron near..... | 201 | x |
| mining..... | 194 | ix | pyrites..... | 149 | A xvi |
| Barytes in..... | 250 | ii | Jaspilite near..... | 175 | x |
| Chondrodite in..... | 53 | R C | mlne, MADOC TP., HASTINGS CO. | | |
| Iron ore in, analysis..... | 196 | ix | Erythrite in..... | 198 | ix |
| | 50 | ii | | 60 | B xiv |
| | 201 | ix | -portage (OR RAVEN-ROCK) | | |
| exhibited in Chicago..... | 81 | ii | lake, NIP. AND QUE. | | |
| London..... | 33 | ii | Description of, by Miller.... | 218, 219 | xi |
| magnetite..... | 346 | R C | Rocks in, petrographical notes. | 228, 229 | xi |
| | 34, 46 | ii | | | |
| | 202 | ix | Crosted Mining Co. | | |
| mining..... | 137 | R C | Capital and date of charter..... | 8 | vii |
| | 34, 44, 45 | ii | Croton, WESTCHESTER CO., N. Y. | | |
| <i>See also</i> Bygrove iron m. | | | Iron mining in..... | 237 | i |
| notes..... | 44, 50 | ii | Treatment of ore..... | 339 | xii |
| tit niferous..... | 141 | xi | Crotty, P. J. | 90 | xi |
| <i>See also</i> Spectacle lake. | | | Crouch lake, LOUGHBOROUGH TP., | | |
| Limestone in, crystalline..... | 72 | B xiii | FRONTENAC CO. | | |
| Mica in..... | 150 | R C | Rocks in vicinity of..... | 288 | xi |
| Molybdenite in..... | 205 | ix | Croucher, F. W. | 174 | v |
| Molybdenum in..... | 232 | vii | Crow. | | |
| Orthoclase in..... | 205 | ix | Abitibi dist..... | 126 | A xiii |
| Cross—? | | | Corbeau pt., L. Superior..... | 128 | viii |
| President, Mont eal Mg. Co. | 64 | iii | Timagami Lake dist..... | 58 | R C |
| A. D. | 103 | vii | Crown Corundum and Mica Co. | | |
| James W. | 85, 86, 189 | v | Award to, Pan American Exhibi- | | |
| | 110, 138, 142, 145, 150 | vi | tion..... | 80, 87 | xi |
| Whitman | 156, 157 | vii | Incorporation and capital of.... | 9 | x |
| | 190 | ix | Objects and officers..... | 26 | x |
| and Foster. | 251 | ii | Crow bay, CROW RIVER, HASTINGS CO. | | |
| "Cross anticlineals." | | | Fossiliferous limestone near ... | 88, 89 | B xiii |
| Notes on, by Lesley..... | 161 | i | lake, BOBS LAKE, LANARK CO. | | |
| inlet, L. OF THE WOODS. | | | Corundum near..... | 227 | viii |
| Notes on, by Willmott..... | 118 | vii | Crow lake, BEDFORD AND OSO TPS., | | |
| Porphyritic schist from, petro- | | | FRONTENAC CO. | | |
| graphy..... | 146 | vii | Apatite mining suspended..... | 251 | ii |
| lake, COLEMAN TP., NIP. | | | Iron ore on..... | 46 | ii |
| Calcite from, analysis..... | 23 | B xiv | lake, BELMONT AND MARMORA | | |
| Rocks on, analyses..... | 50, 51 | B xiv | TPS., PETERBORO AND HAST- | | |
| basalt..... | 39, 50 | B xiv | INGS COS. | | |
| breccia..... | 8 | A xv | Epsomite on..... | 198 | ix |
| diabase..... | 27, 41 | B xiv | Iron ore on..... | 17, 37, 38, 42 | ii |
| Silver veins on..... | 26, 28 | B xiv | Lithographic stone on, analysis. | | |
| mining..... | 80 | A xv | | 60, 61 | B xiii |
| lake, HEADWATERS OF MATTA- | | | | 183, 184 | ii |
| GAMI RIVER, ALG. <i>See</i> Kape- | | | | 137, 138 | iii |
| michekama lake. | | | lake, E OF SABASKONG LAKE, L. | | |
| lake, MICHIPICOTEN DIV., ALG. | | | OF THE WOODS. <i>See</i> Kakagi | | |
| Iron formation near..... | 204 | A xv | lake. | | |
| lake, MOSS TP., TH. B. D. | | | landing, STONY LAKE, PETERBORO | | |
| Notes on, by Blue..... | 120 | v | co. | | |
| Portages north of..... | 125 | v | Black River formation at..... | 210 | viii |
| Road near, description..... | 12 | iv | river, HASTINGS CO. | | |
| Rocks on..... | 76 | v | Blast furnace on, 1820..... | 321 | R C |
| lake, N. E. OF WABIGOON, R. | | | <i>See also</i> Marmora tp. | | |
| R. D. | | | Lithographic stone on..... | 138 | iii |
| Rocks on..... | 62, 84 | iv | Section on..... | 59, 60 | B xiii |
| lake, OLDEN TP., FRONTENAC | | | Trenton formation on..... | 88 | B xiii |
| co. | | | Waterpower on..... | 56 | iii |
| Iron ore near..... | 37 | ii | Rock channel, L. OF THE | | |
| lake, TIMAGAMI RESERVE, NIP. | | | WOODS..... | 186 | v |
| Copper on..... | 56 | R C | Rock island, L. OF THE WOODS. | 186 | v |
| Galena on..... | 56 | R C | Crowhurst Bros. | | |
| | 24, 25 | B xiv | Brick-yard of, Port Hope..... | 62 | B xv |
| | 180 | x | Crowland Natural Gas Co. | | |
| assay..... | 101 | A xiii | Capital and date of charter..... | 37 | A xiii |
| auriferous..... | 26, 57 | R C | | | |
| Gold near..... | | | | | |

| | Page. | Vol. | | Page. | Vol. |
|--|-----------|------|---|--------------|------|
| Crowland tp., WELLAND CO. | | | Crystal gold mine.—Con. | | |
| Natural gas in..... | 91 A | xiv | Notes on, 1895..... | 262 | v |
| log of boring..... | 108 A | xv | 1896..... | 57, 267, 269 | vi |
| Peat in. <i>See</i> Welland. | 104 A | xiv | 1897..... | 86, 138, 139 | vii |
| Crown Lake Silver Mg. Co. | | | Photos of..... | 124, 125 | vii |
| Capital and date of charter..... | 8 | vii | Gold Mining Co. | | |
| Mining Co. | | | Assays made for..... | 214 | v |
| Capital and date of charter..... | 29 A | xvi | Capital of..... | 8 | vii |
| pt., N. Y. | | | and officers..... | 262 | v |
| Eupyrchroite at..... | 441 | R C | Work by, 1896..... | 57 | vi |
| Point gold mine, BAG BAY, L. OF THE WOODS. | | | Crystalline limestone. <i>See</i> LIMESTONE, CRYSTALLINE | | |
| Notes on, 1899..... | 59 | ix | Crystallites (FORMATION). | | |
| 1900..... | 79 | x | Anderdon tp..... | 124 | xi |
| Photos..... | 64, 65 | ix | Cuba. | | |
| Sold to Black Cat Mg. Co..... | 61 A | xiii | Iron mines of, ref. to..... | 237 | i |
| Point Mining Co. | | | Cucumbers. | | |
| Capital and date of charter..... | 9 | ix | Fort Matachewan..... | 240 A | xiv |
| officers..... | 59 | ix | Moose Factory..... | 107 | iv |
| Merged in Black Cat Mg. Co..... | 61 A | xiii | Culbert, D. S. | 140 | x |
| <i>See also</i> Crown Point g. m. | | | 73 | xi | |
| Point silver mine, LYBSTER TP., PORT ARTHUR DIST. | | | 65 | xii | |
| Capital for, from U.S..... | 199 | R C | M. T. | | |
| Idle, 1891..... | 229 | i | Analysis by, of rock from Creighton mine..... | 112, 117 c | xiv |
| 1892..... | 240 | ii | Manager, O'Brien silver mine.. | 80 A | xv |
| Notes on, by Montgomery..... | 201 | R C | Notes by, on: | | |
| Silver of, in Animikie..... | 225 | i | iron belt W. of Hutton tp..... | 222 A | xiii |
| Reef vein, SULTANA GOLD MINE, L. OF THE WOODS. | | | rocks in Norman and Capreol tps..... | 202 A | xiii |
| Notes on..... | 179 | v | 73, 74 c | xiv | |
| Photo of..... | 128, 129 | v | Pyrite crystals found by, Blue lake, Sudbury dist..... | 281 | xii |
| Crow's Nest Pass Coal Co. | | | Work by, 1902..... | 235 | xii |
| Capital and date of charter..... | 11 | xi | 1903..... | 192, 216 A | xiii |
| Crozier tp., R. R. D. | | | 1 c | xiv | |
| Muskeg in..... | 165 | v | S. | 103 | viii |
| Cruikshank —? (1774) | 209 | v | 115 | ix | |
| Cruse Bros. | | | 140 | x | |
| Brick yard of, notes..... | 2, 70, B | xv | Culbute island, OTTAWA RIVER. | 104 B | xiii |
| Cryderman nickel mine, GARSON TP., NIP. | | | Cullasagee creek, NEAR FRANKLIN, N. CAROLINA. | | |
| Rocks at and near..... | 61, 115 c | xiv | Corundum mining on..... | 38 | xi |
| norite..... | 112 c | xiv | Cullen, Patrick. | 51, 52, 57 | xi |
| Sand and gravel east of..... | 256 | xii | Culligan, P. | 29, 37 | ix |
| Cryolite. | | | Cullis, Samuel. | 36 | iii |
| Description of..... | 531 | R C | Cumberland, CUMBERLAND CO., W. VA. | | |
| Hardness and specific gravity of. | 202 | vi | Bricks of, tests on..... | 130 | iii |
| Cryptograms. | | | Paving-clay from, analysis..... | 120 | iii |
| Abitibi dist..... | 243 A | xiv | co., ENGLAND. | | |
| Crysler, FINCH TP., STORMONT CO. | | | Iron ore of, character..... | 133 | R C |
| Gravel deposits near..... | 218 | x | royalties..... | 22, 27, 30 | i |
| Limestone at, fossiliferous..... | 40 B | xiii | Spanish ores used with..... | 121 | ii |
| Trenton..... | 48, 111 B | xiii | tp., RUSSELL CO. | | |
| Crystal (s). | | | Limestone in..... | 108 B | xiii |
| Exhibit of, in World's Fair.. | 186, 187 | iii | Trenton..... | 98 B | xiii |
| Pyrargyrite, Cobalt..... | 14 B | xiv | Peat bog in..... | 190 | i |
| Smaltite, Cobalt..... | 21 B | xiv | 197 | ii | |
| Systems of..... | 200 | vi | Swamp in..... | 108 B | xiii |
| Crystal Beach, BERTIE TP., WELLAND CO. | | | Cummings, A. D. | | |
| Natural gas supply of..... | 135 | i | Gold mining by, L. Nipissing.... | 237 | ii |
| 21, 91 A | xiv | | Uria | | |
| gold mine, BOLAND LAKE, RATHBUN TP., NIP. | | | Concrete system of, description. | 179, 180 A | xiv |
| Diabase near..... | 149 | vii | Notes by, on cements..... | 106, 107 | i |
| Granite in..... | 141 | vii | Cummins, E. | 103 | viii |
| notes..... | 150 | vii | | | |

| | Page. | Vol. | | Page. | Vol. |
|---|------------|--------|--|----------|--------|
| Cuprite (RED COPPER ORE). | | | Cyanite or Kyanite. | | |
| Hardness of..... | 202 | vi | Apatite regions..... | 188 | ii |
| Lake Superior..... | 197 | ix | Description..... | 228 | vi |
| Prospecting for, hints on..... | 456 | R C | Kaladar tp..... | 237 | vii |
| Specific gravity of..... | 202 | vi | | 201 | xi |
| Curran, J. D. | | | Occurrences..... | 200 | ix |
| Gold mining by, Eagle lake..... | 96 | x | Summit creek, Kootenay lake, | | |
| Curran, red | | | B. C..... | 237 | vii |
| Abitibi dist..... | 199, 253 | A xiv | Wanapitei station..... | 237 | vii |
| | 442 | B xiv | Cyanogen. | | |
| Current river, NEAR PORT ARTHUR, | | | Discovery of..... | 142 | iv |
| Th. B. D. | | | <i>Cyathophyllide.</i> | | |
| Photos of..... | 157, 165 | A xv | Parí, Ont., near..... | 91 | B xiii |
| Rocks on..... | 149 | ix | Woodstock..... | 148 | xii |
| Striae on, direction..... | 178 | ix | <i>Cyathophyllum.</i> | | |
| Water-power plant on..... | 13 | A xv | Abitibi river..... | 187, 188 | viii |
| Currie, Capt. | | | Anderdon tp..... | 127 | xi |
| Gold mining by, near Wawa. 103, | 194 | vii | " <i>exiguum.</i> | | |
| Rev. Hector..... | 156 | xii | Anderdon tp..... | 125 | xi |
| J. A. | 23 | xii | Kwataboahagan river..... | 181 | A xiii |
| Curry, J. Walter. | 73 | A xiii | Port Colborne, near..... | 35 | xi |
| William | | | " <i>halli.</i> | | |
| Brick-yard of, Sandwich..... | 102 | B xv | Cayuga, N. tp..... | 146 | xii |
| Curtin, F. | | | Hagersville..... | 145 | xii |
| Brick-yard of, Lindsay..... | 102 | B xv | Kwataboahagan river..... | 181 | A xiii |
| Curtis, Matthew | 61 | R C | Port Colborne (near)..... | 35 | xi |
| W. H. | | | Theedford..... | 154 | xii |
| Boring by, for oil, Brantford.... | 112 | A xv | Walpole and Townsend tps.... | 143 | xii |
| Bros. | | | " <i>tenniseptatum.</i> | | |
| Brick-yard of, Peterboro: | | | Theedford..... | 154 | xii |
| analysis of clay..... | 15 | B xv | " <i>zenkeri.</i> | | |
| notes and photo..... | 94, 95 | B xv | Anderdon tp.... | 125 | xi |
| producing, 1902..... | 29 | xii | Cyclone. | | |
| tp., ALG..... | 166 | xii | See also Storms. | | |
| Curtiss, General James E. | 68 | viii | Merriton..... | 17 | viii |
| Cusack, M. | 103 | vii | <i>Cyclopterus lunipus.</i> | | |
| Cushing lake, MICHIGOTEN DIV., | | | Greens creek, near Ottawa..... | 224 | x |
| ALG. | | | <i>Cyclotrypa borealis.</i> | | |
| Rocks near..... | 325 | A xiv | Kwataboahagan river..... | 185 | A xiii |
| chert..... | 314 | A xiv | photo of section..... | 192, 193 | A xiii |
| Cushman —? | 79 | A xiv | " <i>collina.</i> | | |
| | 40, 91 | A xv | Hamilton formation..... | 185 | A xiii |
| | 78 | A xvi | " <i>communis.</i> | | |
| Custom duties. See Tariffs. | | | Hamilton formation..... | 185 | A xiii |
| mills. | | | <i>Cyclas similis.</i> | | |
| Colorado, notes by Blue..... | 34 | iii | Saugeen clay..... | 26 | B xv |
| Kenora "..... | 31, 34 | iii | <i>Cylichna.</i> | | |
| Larder lake, suggested..... | 217 | A xvi | Ogdensburg (near), N. Y..... | 242 | A xiii |
| Utility of..... | 31 | iii | " <i>alba</i> or <i>C. minuta.</i> | | |
| | 73 | iv | Greens creek, near Ottawa..... | 224 | x |
| Cut worms. | | | <i>Cyperaceae.</i> | | |
| Abitibi dist..... | 129 | A xiii | Ottawa (near)..... | 225 | x |
| Cuthbert —? | 196 | vii | <i>Cypripedium cecadale.</i> | | |
| lake, MICHIGOTEN DIV., ALG. | | | Abitibi dist..... | 253 | A xiv |
| Rocks on..... | 160 | ix | " <i>parviflorum.</i> | | |
| Cuthbertson location. See Bruce | | | Abitibi dist..... | 253 | A xiv |
| Mines. | | | Cypress. | | |
| Cutler, LEWIS TP., ALG. | 63 | A xiv | Kenora..... | 179 | v |
| Cutlery. | | | <i>Cypripedium.</i> | | |
| Canadian imports of, 1881-87.. | 250, 468 | R C | Kwataboahagan river..... | 188 | A xiii |
| Statistics, 1881..... | 116 | ii | " <i>indenta.</i> | | |
| Cuyahoga Silver Cobalt Mines. | | | Kwataboahagan river, photo of, | | |
| Capital and date of charter..... | 29 | A xvi | in limestone..... | 192, 193 | A xiii |
| Cyanide plant. | | | <i>Cypripedium acaule.</i> See Lady's slipper. | | |
| Atlas gold mine..... | 93 | A xiii | " <i>jabrum.</i> | | |
| Deloro gold mine..... | 143 | vii | Moose River basin..... | 177 | A xiii |
| Mikado gold mine..... | 66 | viii | " <i>parviflorum.</i> | | |
| Regina gold mine..... | 51, 52, 92 | vi | Abitibi dist..... | 241 | A xiv |
| | 42, 43 | vii | Mattagami valley..... | 150 | A xv |
| See also Sulman-Teed process. | | | | | |

| | Page. | Vol. | | Page. | Vol. |
|---|----------|------|---|-----------|------|
| <i>Cypripedium pubescens</i> . | | | D 248 gold loc., PASSAGE CHAN- | | |
| Abitibi dist. | 241 A | xiv | NEL, L. OF THE WOODS | 114 | vii |
| Mattagami valley | 150 A | xv | 258 gold loc. See Crown Point | | |
| <i>Cypripedium spectabile</i> . | | | mine. | | |
| Abitibi dist. | 241 A | xiv | 264 gold loc., SIOUX NARROWS, | | |
| Cyr, Paul | 33 A | xv | L. OF THE WOODS. | | |
| Cyrette, Ambrose | | | Notes on, by Willmott | 113 | vii |
| Acknowledgments to | 178 | ii | 397 gold loc. See Imperial | | |
| ..... | 145, 116 | ix | mine. | | |
| Evidence by, before R. C. re: | | | 410 gold loc. See Sirdar mine. | | |
| Heron Bay locations | 115 | R C | 560 gold loc. See Northern | | |
| Prospector's rights | 202 | R C | Light Mines Co. | | |
| Three A mine | 313 | R C | Dacey camp, HANMER TP., NIP. | | |
| Silver discovered by, Silver | | | Gold placer mining at | 257 | vii |
| harbour | 34 | R C | Dacre iron mine, BROTHAM TP., | | |
| See also Beck silver mine. | | | RENFREW CO. | | |
| Cyrette silver mine. See Beck silver | | | Notes on, 1902 | 113, 114 | xii |
| mine. | | | Dady, Timothy | 31 | vii |
| <i>Cyrtina hamiltonensis</i> . | | | Dalilgrin, Gustavus | 32, 33 | vii |
| Anderson tp. | 125 | xi | Daillebout seig., JOLIETTE CO., QUE. | | |
| Thedford | 154 | xii | Nickel and cobalt in | 443 | R C |
| ..... | 69 B | xiii | ..... | 59, 60 B | xiv |
| <i>Cyrtoceras</i> . | | | Dairy farm. | | |
| St. Marys | 152 | xii | Wabigoon lake | 118 | iv |
| " ..... |  |  | ..... | 207 | v |
| Anderson tp | 127 | xi | Daisies. | | |
| <i>Cystiphyllum</i> . | | | Abitibi dist. | 253 A | xiv |
| Thedford | 8, 75 B | xv | Daisy Petroleum Co. | | |
| " | | | Capital and date of charter | 8 | xii |
| Port Colborne (near) | 35 | xi | vein, FERGUSON GOLD MINE, | | |
| " | | | SIOAL LAKE, SEINE RIVER, | | |
| Cayuga, N. tp. | 146 | xii | R. R. D. | 5 Bull. i | |
| Port Colborne (near) | 35 | xi | ..... | 80 | vi |
| Thedford (near) | 154 | xii | Dakota, U.S. See South Dakota. | | |
| <i>Cystopteris bulbifera</i> . | | | Dal Elf river, SWEDEN. | | |
| Mattagami valley | 151 A | xv | Power from, for saw-mills | 483 | R C |
| Czar Gold Mining Co. | | | Dalarne, SWEDEN. See Kopparberg. | | |
| Capital and date of charter | 8 | vii | Dalcoath tin mine, CORNWALL, ENG- | | |
| Czarina Gold Mines Co. | | | LAND. | | |
| Capital and date of charter | 11 | xi | Notes on, by Thomas | 34 | i |
| | | | Originally mined for copper | 173 | i |
| D 14 gold loc., MANITOU LAKE, R. | | | Dale, F. M. | 59 A | xiv |
| R. D. | 84 | vi | J. K. | 89 A | xv |
| 58 gold loc. See Sweden Gold | | | R. W. | | |
| Mg. Co. | | | Notes by, on Schools of Mines, | | |
| 138-140 gold locs., ANZHE- | | | Victoria, Australia | 521 | R C |
| KUMMING LAKE, R.R.D. | 84 | vi | Dalecarlia prov., SWEDEN. | | |
| 145 gold loc., BEAR LAKE, L. | | | Peat in | 219 | ii |
| OF THE WOODS | 99 | vi | Dalhousie tp., LANARK CO. | | |
| 148 gold loc. See Mikado gold | | | Actinolite in | 192 | ix |
| mine. | | | Iron ore in | 23 | R C |
| 177 gold loc., ELLS PEN., L. | | | hematite | 46 | ii |
| OF THE WOODS | 102 | vi | ..... | 199 | ix |
| 205 gold loc., SIOUX NARROWS, | | | martite | 203 | ix |
| L. OF THE WOODS | 100 | vi | mining | 137-139 | R C |
| 212, 216, 217, 229, 265 gold | | | early | 44 | ii |
| locs. See Cornucopia mine. | | | See also Playfair iron | | |
| 213, 214, 228 gold locs., | | | mine. | | |
| SIOAL LAKE, L. OF THE | | | Iron pyrites in | 163 A | xvi |
| WOODS. | | | pyrrhotite | 207 | ix |
| Notes on, 1896 | 50, 51 | vi | ..... | 200 A | xvi |
| 219, 221, 222 gold locs. See |  |  | ..... | 208 | ix |
| Tycoon mine. | | | iron mine. See Playfair iron | | |
| 224, 225 gold locs., REGINA | | | mine. | | |
| BAY, L. OF THE WOODS. | | | <i>Dalmatulla,</i> | | |
| Notes on, by Willmott | 113, 114 | vii | Port Colborne (near) | 36 | xi |
| 233, 289 gold locs. See Enl- | | | <i>Dalmanites anchlops.</i> | | |
| lion No. 1 gold mine. | | | Kwatabohegan river, notes by | | |
| | | | Parks | 190 A | xiii |

| | Page. | Vol. | | Page. | Vol. |
|---|------------|------|---|------------|------|
| <i>Dalmanites (Coronura) aspectans.</i> | | | Darling Road, CANBOROUGH TP., | | |
| Anderson tp..... | 125 | xi | HALDIMAND CO. | | |
| <i>caudatus.</i> | | | Log of gas well near..... | 105 A | xiv |
| Thorold | 117 B | xiii | tp., LANARK CO. | | |
| <i>myrmecophorus.</i> | | | Bournonite in..... | 193 | ii |
| Cayuga N. tp..... | 146 | xii | 195 | | ix |
| <i>stemmatus.</i> | | | Gossan from, analysis..... | 186 A | xvi |
| Kwataboahlegan river.... | 190 A | xiii | Iron ore in, evidence before R.C. | | |
| Dalmer, H. D. | | | 52, 137-142 | | R C |
| Brick-yard of, Conestogo, notes. | | | exhibited at World's Fair, 79-82 | | * ii |
| 29, 104 B | xv | | hematite..... | 199 | ix |
| Dalton, MICHIGICOTEN DIV., ALG. | | | specular..... | 58 | ii |
| Minor refs. to..... | 5, 7 Bull. | iii | limonite..... | 201 | ix |
| 186 | vii | | magnetite..... | 202 | ix |
| Report on country between, and | | | notes by Birkenbine..... | 333 | R C |
| Goulais river..... | 196-204 | viii | Merritt..... | 129 | R C |
| Gold Mg. Co. | | | Iron pyrites in..... | 141 | R C |
| Capital and date of charter..... | 9 | ix | 207 | | ix |
| tp., VICTORIA CO. | | | 150 A | xvi | |
| Allanite in | 193 | ix | mining..... | 153, 154 A | xvi |
| Daly, Dr. Reginald A. | 159 | vii | Limestone in..... | 102 B | xiii |
| Damascus Gold Mg. Co. | | | Serpentine in..... | 83 | R C |
| Capital and date of charter..... | 37 A | xiii | Darlington bay, L. OF THE WOODS. | | |
| Working Cameron Island mine.. | 47 A | xiv | Notes on, by Bigsby and Blue... | 171 | v |
| Dana, Prof. J. D. | | | tp., DURHAM CO. | | |
| Analysis by, of:— | | | Limestone boulders in..... | 40 B | xiii |
| asbestos (average)..... | 97 | iii | Darragh, Ernest J. | | |
| gersdorffite..... | 233 | i | Acknowledgments to..... | 40 A | xiv |
| nickeliferous pyrrhotites..... | 163 | ii | Cobalt silver field discovered by. | 7 A | xvi |
| Asbestos defined by..... | 93 | iii | <i>See also</i> McKinley-Darragh-Savage | | |
| Lithographic-stone described by. | 181 | ii | mines. | | |
| Name Archaean proposed by..... | 528 | R C | Dartmoor, DEVONSHIRE, ENGLAND. | | |
| Notes by, on:— | | | Peat bogs of..... | 207 | ii |
| blending of vein matter..... | 439 | R C | experiments at..... | 207 | ii |
| magnetite..... | 472 | R C | gas from..... | 210 | i |
| Views of, on origin of diamonds. | 121 | ix | 209 | | ii |
| Danaite. | | | Datolite. | | |
| Cobalt in, percentage of..... | 203 | xi | Loughborough tp..... | 194 | ii |
| Cobalt dist., Ont..... | 101 A | xiii | 197 | | ix |
| Graham tp..... | 197 | ix | Daube, Oscar | | |
| 60 B | xiv | | Ref. to paper by, on iron smelting. | | |
| Hastings dist., in mispickel..... | 197 | ix | 331, 342 | | xii |
| Dance tp., R. R. D. | | | Daubree, G. A. | | |
| Soil in, character..... | 130-133 A | xiii | Notes by, on iron ores of Arendal. | 472 | R C |
| Trees in | 124 A | xiii | Daunais, Oliver | | |
| Danchelle—? | | | Discoverer of Rabbit and Silver | | |
| Peat-drying process of..... | 196 | i | Mt. veins..... | 35 | R C |
| Dandelion. | | | Gold mining by, L. of the Woods. | | |
| Abitibi dist..... | 253 A | xiv | 105, 252 | | vi |
| Dandy gold mine, MICHIGICOTEN | | | Wabigoon lake. | | |
| DIV., ALG. | 100 | vii | <i>See</i> Wabigoon g. m. | | |
| Daniels, Freeman J. | 128, 129 | x | Owner of Nonesuch and Three | | |
| William | 31 | ix | Ladies mines..... | 48 | vi |
| Dannemora, UPSALA PROV., SWEDEN. | | | Three Friends mine..... | 49 | vi |
| Iron ore of..... | 472-475 | R C | lake, SILVER MT., LYBSTER TP., | | |
| character | 479 | R C | TH. B. D. | | |
| Daquam, TEMISCAMATA CO., QUE. | | | Water from, for East End mine.. | 84 | vii |
| Peat at | 198 | ii | Davenport, F. | | |
| Darby, Abraham | | | Brick-yard of, Orwell..... | 62 B | xv |
| Smelting process of (1730). | | | R. W..... | 189 | iv |
| xxi, 357, 358 | | R C | Davenport, YORK TP., YORK CO. | | |
| Darcy, W. | 40, 41 A | xiii | Iroquois beach at | 229 A | xiii |
| Dardanelles, SEA OF MARMORA. | | | David, King | 168 | i |
| Historical notes..... | 167 | i | David Katossin's claims. <i>See</i> Kat- | | |
| (LARDER LAKE) Gold Mines. | | | ossin iron claims. | | |
| Capital and date of charter | 28 A | xvi | | | |
| Dargavel tp., NIP. | | | | | |
| Soil and timber of | 142 A | xv | | | |
| Darius (KING) | 106 | i | | | |

| | Page | Vol. |
|--|---------------------|--------|
| David lakes, E. BRANCH OF PUKAS-KWA RIVER, L. SUPERIOR. | | |
| Iron mining near. <i>See</i> Katossin iron claims. | | |
| Minor ref. to | 284 | A xiv |
| Rocks near | 354 | A xiv |
| iron-bearing | 316 | A xiv |
| schists, notes on | 306 | A xiv |
| Trees near | 296 | A xiv |
| Davidson, George | 224 | i |
| John | | |
| Gold mining by, Jackfish (near). | 86 | x |
| Michipicoten div. | 103 | vii |
| | 103 | viii |
| | 115 | ix |
| | 140 | x |
| | 73 | xi |
| | 65 | xii |
| | 48 | A xiii |
| John I. | 78 | A xv |
| William | 31 | vii |
| Davies, E. H. | | |
| Manager, Beatrice mine | 249 | ii |
| | 190 | iii |
| Notes by, on Copper Cliff mine. | 69, 272 | vi |
| | 94 | vii |
| Stobie mine | 275 | vi |
| William | | |
| Notes by, on apatite mines, Perth dist. | 174 | R C |
| | 251 | ii |
| Davis, A. L. | 22 | ix |
| Prof. C. A. | | |
| Visiting Ont. with British Ass'n. | 144 | vii |
| Work by, on marls of Michigan. | 119, 120 | A xiv |
| Hon. E. J. | | |
| Photo of, on lithographic stone, at Pan-American Exhibition. | 88 | xi |
| Transmittal letters to, and by:— | | |
| 1899 | 1, 3 | ix |
| 1900 | 4, 5 | x |
| 1901 | 1, 2 | xi |
| 1902 | 1, 2 | xii |
| 1903 | ix, x | A xiii |
| H. | 104, 121 | A xiii |
| H. J. | 134 | vii |
| Henry | | |
| Manager, Copper Cliff mine | 182 | iii |
| | 208, 211, 213, 240, | iv |
| | 272 | v |
| Evans mine | 184 | iii |
| | 245 | iv |
| Stobie mine | 245 | iv |
| | 269 | v |
| Ithel | 30, 39 | A xv |
| J. | 140 | x |
| | 73 | xi |
| | 65 | xii |
| | 48 | A xiii |
| James | 25 | ix |
| | 232 | xi |
| Joseph | 29 | xii |
| | 118 | B xv |
| R. K. | 519 | R C |
| Tom | 85 | ix |
| W. H. | 251 | ii |
| J. & Son. <i>See</i> Davis, Joseph | | |

| | Page | Vol. |
|--|----------|----------|
| Davis lake, ABITIBI DIST., NIP. | | |
| Description of | 111 | A xiii |
| Glacial striae on | 115 | A xiii |
| Rocks on, dolerites | 116, 117 | A xiii |
| syenite | 119 | A xiii |
| nickel mine. <i>See</i> Sheppard nickel mine. | | |
| pyrites mine, FRANKLIN CO., MASS. | | |
| Minor ref. to | 184 | A xvi |
| Notes on, by Rutledge | 191, 192 | A xvi |
| pyrites mine, MADOC TP., HASTINGS CO. | 161 | A xvi |
| rapid, MATTAGAMI RIVER, ALG. | | |
| Country east of, description | 146 | A xv |
| Laurentian rocks at | 121, 134 | A xv |
| Silver Cobalt Mines, Ltd. | | |
| Capital and date of charter | 28 | A xvi |
| Sulphur Ore Co. | | |
| Iron pyrites mining by, near Schreiber | 78, 134 | vii |
| tp., SUDBURY DIST., NIP. | | |
| Copper prospecting in | 98 | ix |
| Mispickel in | 106 | xi |
| Davison, J. E. | 209 | x |
| Davisville, TORONTO. | | |
| Brick-yard at | 110 | B xv |
| Pottery works at | 29 | xii |
| | 118 | B xv |
| Davy, Sir Humphrey | | |
| Reference to experiments by, on carbon and potassium | 153 | iv |
| Dawn tp., LAMBTON CO. | | |
| Oil in | 15 | viii |
| boring for | 19 | vii |
| log | 114 | A xiv |
| discovery | 18 | vii |
| production, 1900 | 17 | x |
| Dawson, George | 103 | x |
| | 149 | xi |
| Dr. George M. | | |
| Acknowledgments to | 48 | v |
| | 6, 169 | vi |
| | 215 | x |
| Notes by, on anthraxolite | 2 | Bull. ii |
| References to surveys by:— | | |
| British Columbia | 160 | vii |
| L. Superior | 168 | viii |
| Montana | 157 | vii |
| Views of, on:— | | |
| Corniferous limestone of Anderton tp. | 126 | xi |
| lacustrine deposits, R.R.d. | 91 | v |
| Mamainse copper deposits | 78-82 | iii |
| metalliferous character of Huronian | 249 | v |
| Visit of, to L. of the Woods | 172 | v |
| Dr. J. W. | | |
| Notes by, on Leda clay and Saxicava sand | 32 | B xv |
| Views of, on origin of apatite. | 438, 443 | R C |
| Dawson, S. J. | | |
| Evidence by, before R. C., <i>re</i> :— | | |
| farm lands, Port Arthur dist. | 239 | R C |
| forest fires | 311 | R C |
| free trade | 232 | R C |
| gold, L. of the Woods | 118 | R C |
| limestone, Manitoulin island .. | 84 | R C |

| | Page. | Vol. | | Page. | Vol. |
|---|--------|------|---|--------------|------|
| Dawson, S. J.—<i>Con.</i> | | | Deacon, T. R.—<i>Con.</i> | | |
| Evidence by, before R.C., <i>re:—Con.</i> | | | Manager, Mikado g. m. | 77, 93 | x |
| minerals, L. Superior dist. | 61 | R C | | 65 | xi |
| silver, Silver islet. | 197 | R C | Ontario Gold Conces- | | |
| technical education. | 424 | R C | sions. | 86, 87 | viii |
| Prospecting by, on Silver Centre | | | Dead Broke gold mine, RED-ROCK | | |
| mine. | 229 | i | ISLAND, L. OF THE WOODS. | | |
| Sir William | | | Notes on, 1892. | 232 | ii |
| Acknowledgments to. | 224 | x | lake, AN ARM OF WINDIGOKAN | | |
| Principal, McGill University. | 217 | i | LAKE, TH. B. D. | | |
| Ref. to "Canadian Ice Age" of. | 215 | x | Character of. | 138 A | xvi |
| Views of, regarding:— | | | river, MICHIPICOTEN RIVER, | | |
| ancient sea-level in Eastern | | | ALG. | | |
| Canada. | 223 | x | Formation of, by H.B.C. | 177 A | xv |
| marine deposits of Eastern On- | | | Deadman portage, SHOAL LAKE, L. | | |
| tario. | 226 | x | OF THE WOODS. | 56 | vii |
| Dawson, HANMER TP., NIP. | | | Dean, Alfred | 30 | vii |
| Country N. of, character. | 216 A | xiii | Judge | | |
| worth prospecting. | 17 | xi | Marble quarrying by, Somerville | | |
| Gold prospecting near. | 151 | x | tp. | 114 B | xiii |
| Gravel beds near. | 73 C | xiv | and Williams gold mine, MAR- | | |
| altitude. | 158 | x | MORA TP., HASTINGS CO. | | |
| | 103 C | xiv | Mispickel in. | 103 | xi |
| Minor ref. to. | 178 | x | Position of. | 28 | R C |
| Muskegs and sand-plains near. | 202 A | xiii | Lake (LATE THOMPSON), | | |
| Rocks near. | 204 A | xiii | THOMPSON TP., ALG. | | |
| diabase. | 72 C | xiv | Copper mining near. | 69 A | xv |
| Route from, to Wanapitei lake, | | | 15, 41, 70 A | xvi | |
| description. | 185 | x | Deane, Alfred. | 216 | i |
| cottage, STURGEON LAKE, TH. | | | De Beers diamond mine, KIMBER- | | |
| B. D. | | | LEY, S. AFRICA. | | |
| Photo of lake from. | 55 A | xiv | Notes on. | 122 | ix |
| gold mine, STURGEON LAKE, | | | Wetherill separator used at. | 326 | xii |
| TH. B. D. | | | De Brughat, Challeton | | |
| Notes on, 1902. | 84, 85 | xii | Peat drying process of, notes. 194, 195 | | i |
| (OR WABI) pt., L. TIMISKAMING, | | | Decatur, MACON CO., ILL. | | |
| Rocks at. | 87 B | xiii | Brick pavements of. | 112 | iii |
| route, The, TH. B. AND R. R. | | | Decca gold mine, NEAR MINE CENTRE, | | |
| DISTS. | | | R. R. D. | | |
| Notes on, by Blue. | 115 | v | Depth of, 1899. | 35 | ix |
| historical. | 134 | v | Notes on, 1898. | 83, 273, 278 | viii |
| tp., MANITOULIN ISLAND, ALG. | | | 1899. | 68, 69 | ix |
| Limestone in. <i>See</i> Meldrum Bay. | | | Work suspended, 1900. | 84, 94 | x |
| Day, David T. | 90 | xi | Gold Mining Co. | | |
| John F. | 40 | iii | Capital and date of charter. | 9 | viii |
| V. P. | | | Work by, 1898. | 83 | viii |
| Notes by, on Godfrey mica mine. | 245 | i | Deception lake, McTAVISH TP., TH. | | |
| Days Mills, DAY TP., ALG. | | | B. D. | | |
| Boulder-clay near. | 156 | viii | Iron ore from, analysis. | 168 A | xv |
| Dayton, ALG. | | | Rocks on. | 169 A | xv |
| Rocks near. | 163 | viii | iron bearing. | 259 A | xiv |
| DB 13, 14, 16 copper locs., PARRY | | | DeCew, J. | | |
| SD., P. S. D. | 168 | ix | Remarks by, on limestone boul- | | |
| gold vein, NEAR MOORE BAY, | | | ders, Norfolk co. | 88 B | xiii |
| L. OF THE WOODS. | 21, 22 | ii | Decew quarry, NEAR GILL, HALDI- | | |
| Deacon, C. B. | 80 | viii | MAND CO. | | |
| T. R. | | | Notes on; analysis of stone from. | 56 B | xiii |
| Director, Mikado gold mine. | 52 | ix | DeCewsville, N. CAYUGA TP., HALDI- | | |
| Gold mining by, L. of the Woods. 93, 96 | | vi | MAND CO. | | |
| Engleclue con- | | | Meteorite at, notes on. | 203 | ix |
| cessions. | 55 | vii | Decon, Thomas. | 25 | viii |
| Helldiver bay. | 58 | ix | Deep Oil and Gas Co. | | |
| Regina bay. | 113 | vii | Capital and date of charter. | 24 A | xiii |
| Independent gold mine examined | | | Deep Rock Cobalt Silver Mines. | | |
| by. | 76 | ix | Capital and date of charter. | 28 A | xvi |
| Magnetite noted by, Halkirk tp. | 75 | iv | Deer. | | |
| | | | Michipicoten div. | 200 A | xv |

| | Page. | Vol. |
|--------------------------------------|------------|------|
| Deer, red | | |
| Abitibi River region..... | 193 | viii |
| | 127 A | xiii |
| | 242, 253 A | xiv |
| Blanche River region..... | 224 | xi |
| Hudson Bay slope, scarce..... | 178 | vi |
| L. Huron slope..... | 170 | vi |
| Mattagami valley..... | 131 A | xv |
| Michipicoten div..... | 297 A | xiv |
| Mississagi River dist..... | 172 | xii |
| Moose River basin..... | 178 A | xiii |
| Nipigon Lake dist..... | 139 A | xvi |
| Niven's base line and south of, Alg. | 142 | ix |
| Rainy Lake dist..... | 97 | iv |
| Timagami Lake dist..... | 58 | R C |
| flies. | | |
| Abitibi dist..... | 128 A | xiii |
| Lake, Mich. | | |
| Record of iron furnace at..... | 339 | R C |
| lake, BELMONT TP., PETERBORO | | |
| co. | | |
| See also Belmont g. m. | | |
| Diorite on..... | 193 | xi |
| Falls on, photo..... | 112, 113 | xii |
| power from, for gold | | |
| milling..... | 27 | xi |
| | 56 | xii |
| | 14 A | xiv |
| Iron ore on..... | 42 | ii |
| lake, CARDIFF TP., HALIBURTON | | |
| co. | | |
| Nepheline-syenite near..... | 217 | viii |
| Lake station, CARDIFF TP., | | |
| HALIBURTON CO. | | |
| Syenite west of, carrying corun- | | |
| dum..... | 210 | viii |
| Lake dist., EAST OF WHITEFISH | | |
| BAY, L. OF THE WOODS. See | | |
| Sturgeon Lake. | | |
| river, DEER LAKE, PETERBORO' | | |
| co. | | |
| Specular iron ore on..... | 39 | ii |
| Waterpower on..... | 92 | ix |
| | 188 | xi |
| river, PARRY SD. DIST. | | |
| Limestone on..... | 94 B | xiii |
| containing scapolite.. | 170 | ix |
| river, SEINE RIVER. See Eye | | |
| river. | | |
| Trail Consolidated Mg. Co. | | |
| Capital and date of charter..... | 11 | xi |
| De Haas, N. G. | 140 | x |
| | 73 | xi |
| Dehydrating agent. | | |
| Quicklime as..... | 5 B | xiii |
| DeKalb, Courtenay | | |
| Experiments by, on corundum, | | |
| ref. to..... | 239 | vii |
| | 233, 239, | viii |
| Manual of Explosives by, ref. to. | 25 | ix |
| | 49 | x |
| Paper by, on Corundum..... | 240-250 | vii |
| Report by, as Inspector of | | |
| Mines:— | | |
| 1898..... | 28-48 | viii |
| 1899..... | 89-111 | ix |
| 1900..... | 113-135 | x |
| accidents..... | 46-49 | x |
| 1901 “..... | 48-57 | xi |

| | Page. | Vol. |
|---|------------|------|
| DeKalb, Courtenay—Con. | | |
| Report by, on Laboratory of Kings- | | |
| ton Mining School..... | 262, 263 | vii |
| Retirement of..... | 6, 7 | xi |
| Work by, 1900..... | 6 | x |
| junction, NEW YORK STATE. | | |
| Pyrites from near..... | 152, 184 A | xvi |
| cost of mining..... | 153 A | xvi |
| Railway from, to Stella mine.... | 191 A | xvi |
| De la Beche, Sir Henry T. | 220 | i |
| De La Mar, Col. J. R. | | |
| Director, International Nickel Co. | 22 | xi |
| Minor refs. to..... | 199 A | xiii |
| | 67, 172 C | xiv |
| Del Monte springs, PRESTON, WATER- | | |
| LOO CO. | 61 | i |
| Delaware, DELAWARE TP., MIDDLE- | | |
| SEX CO. | | |
| Brick-yard at..... | 79 B | xv |
| and Mount Brydges Oil and | | |
| Gas Co. | | |
| Capital and date of charter..... | 8 | vii |
| Delbert lake, E. OF MATTAGAMI | | |
| RIVER, ALG. | | |
| Beaver dams near..... | 127 A | xiii |
| Description of..... | 105 A | xiii |
| Rocks on and near, dolerite.... | 116 A | xiii |
| porphyry..... | 120 A | xiii |
| strike..... | 121 A | xiii |
| Soil from, character..... | 130 A | xiii |
| Trees on..... | 122 A | xiii |
| Delesse—? | | |
| Analysis by, of gypsum, Haldi- | | |
| mand co..... | 56 B | xiii |
| Delessite. | | |
| L. Superior, in amygdaloids.... | 197 | ix |
| Delft, HOLLAND. | | |
| Polytechnic school at..... | 500 | R C |
| DeLoro, MARMORA TP., HASTINGS CO. | | |
| Arsenic at..... | 38 | iv |
| | 205 | ix |
| for plate-glass..... | 32 B | xiv |
| plant..... | 174 | i |
| | 14, 36 | xii |
| | 31 B | xiv |
| bought by Deloro | | |
| Mg. Co..... | 12 A | xvi |
| closed, 1890..... | 18 A | xiii |
| 1905..... | 23 A | xv |
| for Cobalt ores..... | 73 B | xiv |
| proposal to re-open. | 25 A | xvi |
| Gold at..... | 38 | iv |
| exhibited at World's Fair.. | 191 | ii |
| mining. See Deloro gold | | |
| mine. | | |
| gold mine, DELORO, HASTINGS | | |
| co. | | |
| Accidents at, 1897..... | 31 | vii |
| 1902..... | 43 | xii |
| Amalgamation with Atlas Co. | | |
| proposed..... | 93 A | xiii |
| Arsenic in, composition..... | 112 | xi |
| description of process. | 106-108 | xi |
| prevention of poison | | |
| by..... | 120, 121 | xi |
| Boring in, with diamond drill. | 52, 56 | x |
| Closed down..... | 18 A | xiii |
| | 22 A | xiv |

| | Page. | Vol. | | Page. | Vol. |
|--|-------------------|-------------------|---|-------------------|--------|
| Deloro gold mine.—Con. | | | Denison falls, DOG RIVER, L. SUPERIOR. | | |
| Cyaniding at, ref. to..... | 143 | vii | Nomenclature of..... | 141 | viii |
| Depth of, 1901..... | 197 | xi | Photo of..... | 168, 169 | viii |
| Fire at, destroys mill..... | vi | Pr. iii, Vol. vii | Schist conglomerate at..... | 146, 166 | viii |
| | 21 | viii | Water-power on..... | 299 | A xiv |
| Geological features of: | | | Mining Co. | | |
| notes by Coleman..... | 59, 60 | vi | Capital and date of charter..... | 8 | vii |
| Miller..... | 206 | xi | tp., SDBURY DIST. | | |
| rocks..... | 194 | xi | Brick-yard in. <i>See</i> Whitefish. | | |
| diorite, changed to schist, | | | Copper in..... | 24 | R C |
| diagram..... | 189 | xi | chalcopyrite..... | 91 | i |
| Notes on, 1895..... | 264 | v | | 197 | ix |
| 1896..... | 58, 59 | vi | evidence before R. C. | | |
| 1897..... | 90-92 | vii | 104-106, 425 | | R C |
| 1898..... | 39, 40 | viii | notes by Merritt..... | 88, 89 | R C |
| 1899..... | 90, 91 | ix | Galena in..... | 92 | i |
| 1900..... | 115, 116 | x | Gersdorffite in..... | 213 | vi |
| 1901..... | 62, 63, 195, 196, | | analysis..... | 233 | i |
| 232, 233 | | xi | Gold in..... | 59, 106, 112, 205 | R C |
| 1902..... | 108, 109 | xii | 92 | | i |
| by Blue..... | 22 | viii | discovery..... | 425, 426 | R C |
| Kirkegaard and | | | mode of occurrence..... | 108, 113 | R C |
| Wright..... | 103, 104 | xi | notes by Bell..... | 26 | B C |
| Operating, 1897..... | 234 | vii | Vine land speculation in..... | 309, 310 | R C |
| Re-opening of, expected..... | 74 | A xvi | Morenosite in..... | 205 | ix |
| Summer mining class at..... | 56 | xii | Nickel in, arsenate..... | 205 | ix |
| Mining and Reduction Co. | | | mining..... | 64 | A xv |
| Cobalt ores to be worked by.... | 25 | A xvi | <i>See also</i> Kream Hill m. | | |
| Gold-arsenic plant bought by.... | 12 | A xvi | Victoria m. | | |
| Delta, BASTARD TP., LEEDS CO. | | | niccolite..... | 205 | ix |
| Lime-kilns at..... | 72 | B xiii | prospecting..... | 232 | i |
| photo..... | 64 | B xiii | | 249 | ii |
| DeMarr concrete system. | | | Platinum in..... | 113 | R C |
| Description of..... | 180 | A xiv | 179 | | ii |
| Demars gold mine, MARMORA TP., | | | sperrylite..... | 181 | R C |
| HASTINGS CO. | | | 141 | | vi |
| Ore of, arsenical..... | 53 | iii | 209 | | ix |
| Demme, Rodolph A. | 159 | v | Polydymite in..... | 207 | ix |
| | 81 | vi | Rocks in..... | 242 | xii |
| Demmier Bros. | 119 | ii | diorite..... | 434 | R C |
| Demorest, W. <i>See</i> next ref. | | | greenstone..... | 75 | i |
| and Sylvester. | | | green-bearing eruptive. | | |
| Acknowledgments to..... | 131 | ix | 24, 25, 30 | | c xiv |
| | 192 | A xiii | norite..... | 31, 32 | c xiv |
| Work by, for R. McConnell..... | 73 | A xiii | olivine-diabase..... | 127 | c xiv |
| Superior copper | | | Silver in..... | 203 | R C |
| mine..... | 271 | xi | Tin in..... | 211 | ix |
| Denbigh, DENBIGH TP., ADDINGTON | | | Denmark, Dr. | 28 | viii |
| CO. | | | Denmark. | | |
| Boulders in, of nepheline-syenite. | 224 | viii | Peat in, notes on..... | 211, 212 | ii |
| tp., ADDINGTON CO. | | | | 198 | xii |
| Gold in..... | 199 | ix | lake, L. OF THE WOODS. | | |
| Graphite in..... | 199 | ix | Gold mining on..... | 74 | x |
| <i>See also</i> Allanhurst graphite m. | | | <i>See also</i> Reliance mine. | | |
| Rocks near..... | 224 | viii | Dentalium. | | |
| Sulphur in..... | 210 | ix | Ottawa..... | 225 | x |
| Dendragapus canadensis. <i>See</i> Gronse, | | | Dentinger, A. | 103 | vii |
| Canada | | | Deodorizers. | | |
| Dendroica aestiva. <i>See</i> Warbler, yellow | | | Moss litter..... | 190, 191 | vi |
| "blackburniae." <i>See</i> Warbler, pro- | | | <i>See also</i> Moss litter. | | |
| thonotary | | | Depew, Chauncey. | 100 | iii |
| Denholm tp., WRIGHT CO., QUE. | | | Depot harbour, PARRY ISLAND, | | |
| Apatite deposits in..... | 436 | R C | GEORGIAN BAY. | | |
| with feldspar and quartzite.... | 437 | R C | Rocks on, limestone..... | 166 | ix |
| Denis, T. D. | 270 | A xiv | 95 | | B xiii |
| Denison, C. L. | 76 | A xv | petrography..... | 181 | ix |
| (LONGWELL) claim, COBALT. | | | Depuis, L. N. | 97 | x |
| Cobalt in, analysis..... | 23 | B xiv | Derby, A. O. | 230 | vii |
| Strike of veins in..... | 37 | B xiv | | | |

| | Page. | Vol. | | Page. | Vol. |
|--|----------|------|---|------------|------|
| Derby tp., GREY CO. | | | Desolation lake, MICHIGICOTEN DIV., ALG. | | |
| Niagara formation in | 50 B | xiii | Rocks east of | 344 A | xiv |
| Dereham tp., OXFORD CO. | | | Despair lake, W. OF RAINY LAKE, R. R. D. | | |
| Artesian wells in. | 62 | i | Rocks on, Keewatin | 60 | iv |
| Brick-yard in. <i>See</i> Brownsville. | | | serpentine | 50, 76, 93 | iv |
| Oil in | 91 B | xiii | | 209 | ix |
| Deroche and Burrows. | 112 | R C | Determination of minerals. | | |
| tp., ALG. | | | Hints on, by Miller and Good- | | |
| Iron in | 315 | xii | win | 203, 229 | vi |
| hematite | 139 | xi | <i>See also</i> Minerals. | | |
| mining. <i>See</i> Breitung Iron Co. | | | Detlor, (LATE L'AMABEL), DUN- | | |
| Derricks for oil-wells. | 102 A | xvi | GANNON TP., HASTINGS CO. | | |
| Derry A. H. | 100 | xii | Iron mining near. <i>See</i> Mineral | | |
| George | | | Range mine. | | |
| Gold mining by, L. of the Woods. | 42 | ix | Railway from, to Barry bay, | | |
| Ira | 47, 50 | x | suggested | 78 A | xiv |
| P. A. | | | Detroit, MICH. | | |
| Foreman, Superior copper mine. | 274 | xi | Blast furnaces at | xv | R C |
| | 100 | xii | notes on cost | 399 | R C |
| | 41 | xiv | Brick pavements in | 108 | iii |
| Wawa G. M. Co. | 101, 103 | viii | Gas to, from Essex co. | 123 | i |
| Licence to | 115 | ix | | 28 | iv |
| | 140 | x | | 29 | v |
| Manager, Superior copper mine. | 45 A | xv | | 19 | vii |
| Desbarats, JOHNSTON TP., ALG. | | | amount of | 19 | x |
| Glacial striae north of, direction. | 211 | x | | 42 | xi |
| Iron prospecting at | 25, 97 | vii | prohibited | 106 | ix |
| Nickel-copper mining near. <i>See</i> | | | | 41 | xi |
| Stobie copper mine. | | | | 39 | xii |
| Mining Co. | | | | 91, 108 A | xiv |
| Capital and date of charter | 11 | xi | Sulphuric acid works at | 184 A | xvi |
| Deseronto, TYENDINAGA TP., HASTINGS CO. | | | and Algoma Silver Mg. Co. | | |
| Altitude of | 222 | x | Capital and date of charter | 28 A | xvi |
| Black River formation at | 27 B | xiii | and Cobalt Development Co. | | |
| Blast furnace at | 22 | xii | Capital and date of charter | 29 A | xvi |
| | 10 A | xiii | and Dominion Oil Co. | | |
| notes, 1898. | 6 | viii | Capital and date of charter | 26 A | xv |
| 1899 | 15, 102 | ix | Oil well of, Essex co. | 116 A | xiv |
| 1900 | 27 | x | and Hastings Mining and | | |
| operating | 25 | xi | Milling Co. | | |
| photos. Frontis. Vol. viii | | | Capital and date of charter | 8 | vii |
| | 32, 33 | ix | and Kent County Oil and Gas | | |
| proposed | 234 | vii | Co. | | |
| quality of ore used at | 24 | xi | Capital and date of charter | 26 A | xv |
| Charcoal ovens at | 88, 481 | B C | and Leamington Oil Co. | | |
| | 3 B | xiii | Capital and date of charter | 26 A | xv |
| Terra-cotta plant at, burnt | 77 | R C | Wells of, number | 116 A | xiv |
| | 120 B | xv | and Parry Sd. Mg. Co. | | |
| Iron Co. | | | Capital and date of charter | 25 A | xiv |
| Bounty payments to, 1900 | 32 | x | Mining and Development Co. | | |
| Minor ref. to | 288 | viii | Work by, 1906. | 43, 59 A | xvi |
| Desert lake, ABERDEEN TP., ALG. | | | Oil Exchange. | | |
| Iron ore on, hematite | 315 | xii | Capital and date of charter | 26 A | xv |
| mining | 143 | R C | Union Iron Co. | | |
| | 64 | ii | Iron production of, cost | 338 | R C |
| lake, FRONTENAC CO. | | | Record of furnaces | 339 | R C |
| Fahlband on | 163 A | xvi | river, L. ERIE. | | |
| Feldspar mining near | 26 | x | Corniferous formation on | 127 | xi |
| | 90 A | xiii | Erie clay east of | 10 B | xv |
| | 8 A | xiv | Helderberg formation on | 123 | xi |
| | 39, 40 A | xv | Island park in, notes by Blue .. | 107 | v |
| Lake Iron Co. | | | Detweiler, D. B. | 141 | x |
| Capital and date of charter | 8 | vii | N. B. | 141 | x |
| Desjardins canal, HAMILTON. | | | Deux Rivières, CLARA TP., NIP. | | |
| Gravels of | 236 A | xiii | Trenton formation near | 84 B | xiii |
| Vertebrate remains in | 229 A | xiii | | | |

| | Page. | Vol. |
|--|------------|------|
| Devil Cascade, MANITOU SOUND, | | |
| RAINY LAKE. | | |
| Height of..... | 83 | vi |
| Laurentian gneiss at..... | 52 | v |
| Devils gap, L. OF THE WOODS..... | 13, 14 | iii |
| 180, 181, 186 | | v |
| 93 | | vi |
| hill, TIMAGAMI LAKE, NIP. | | |
| Rocks near..... | 174 | x |
| Devil island, BLANCHE RIVER. See | | |
| Diable island. | | |
| lake, FRONTENAC CO. | | |
| Iron pyrites on..... | 207 | ix |
| Mica mining on..... | 150 A xvi | |
| 245 | | i |
| 103 A | | xv |
| lake, PETERBORO CO. | | |
| Iron mining on..... | 214 | viii |
| rapid, MISSINAIBI RIVER, ALG. | 195 | viii |
| rock, L. TIMISKAMING, NIP. | | |
| Huronian south of..... | 41 B | xiv |
| Denville, St. Clair. See Saint Claire | | |
| Denville. | | |
| Devine, Thomas. | 145 | vi |
| Devlin tp., R. R. D. | 165, 167 | v |
| Devon Great Consols Mine, BLANCH | | |
| Down, CORNWALL, ENG. | | |
| History of..... | 61 | iii |
| Devonian. | | |
| Area of, in Ont..... | 182 A | xvi |
| Abitibi river..... | 186 | viii |
| photo..... | 160, 161 A | xiii |
| Building-stone from..... | 185 | ii |
| Definition of..... | 532 | R C |
| Divisions of, in Ont..... | 2 | R C |
| James bay..... | 96 A | xiv |
| Lakes Erie and Huron, notes | 194 | viii |
| by Miller..... | 25 A | xiii |
| Missinaibi river..... | 194 | viii |
| Named after Devon co., Eng.... | 46 | R C |
| Notes on, by Bell..... | 46 | R C |
| Blue..... | 169, 170 | i |
| Rio Tinto, Spain..... | 192 A | xvi |
| Thedford, analysis..... | 9 B | xv |
| for bricks..... | 8 B | xv |
| photo..... | 11 B | xv |
| Thickness of, in Ont..... | 196 | v |
| Devonshire, Duke of. | 247 | i |
| Devonshire, ENGLAND. | | |
| Arsenic mining in..... | 101, 110 | xi |
| production..... | 111 | xi |
| Devonian system named after... | 46 | R C |
| Tin and copper in..... | 173 | i |
| Dewar, J. D. | | |
| Evidence by, before R. C. re:— | | |
| fire-clay, Toronto..... | 54 | R C |
| gold, L. of the Woods..... | 114 | R C |
| Minor ref. to..... | 25 | R C |
| Dewey, F. P. | | |
| Assays by, of Sudbury ore.. | 179, 180 | ii |
| Dexter, J. B. | 103 | viii |
| Diabase. | | |
| Abitibi region, petrographical | | |
| notes..... | 210 A | xiv |
| Animikie iron range, analysis... | 171 A | xv |
| Bruce Mines, for road-making... | 126 | viii |
| petrography..... | 169 | viii |
| Canoe-canal lake, petrography... | 229 | xi |

Diabase.—Con.

| | Page. | Vol. |
|--|------------------|-------|
| Diabase.—Con. | | |
| Cobalt dist., description..... | 41 B | xiv |
| notes..... | 48-50 B | xiv |
| silver ores in..... | 28, 29 B | xiv |
| Definition and description..... | 532 | R C |
| Great Huronian Belt, notes by | | |
| Bell..... | 76, 77 | i |
| Larder Lake dist: | | |
| contact with conglomerate.... | 213 A | xvi |
| Post Huronian..... | 219 A | xvi |
| Mattagami river, petrographical | | |
| notes..... | 133 A | xv |
| Missinaibi, notes by Coleman... | 149 | vii |
| Nipigon Lake region:— | | |
| character..... | 115 A | xvi |
| horizontal sheets..... | 107 A | xvi |
| Nipigon lake, photos... 110, | 134 A | xvi |
| river, photos..... | 137 A | xvi |
| Notes on, by Miller..... | 235 | vi |
| Parry Sound dist..... | 180 | ix |
| Sand Bay copper mine..... | 170 | viii |
| Sturgeon pt., L. Superior, sketch. | 145 | ix |
| Sturgeon river, L. Nipigon, pot | | |
| holes in..... | 137 A | xvi |
| Sudbury dist. :— | | |
| analysis, photos and notes by | | |
| Coleman..... | 84, 85, 125, 126 | C xiv |
| notes by Bell..... | 434, 435 | R C |
| petrography..... | 297, 298 | xii |
| Thunder bay, petrography.... | 178 | ix |
| Timagami dist..... | 164 | x |
| Wabigoon Lake dist..... | 183 | vii |
| dolerite | | |
| Mattagami river, petrography... | 141 A | xiii |
| olivine | | |
| Port Arthur dist..... | 127 C | xiv |
| Port Coldwell, petrography..... | 148 | vii |
| Quinze river, Que..... | 229 | xi |
| Sudbury dist., notes by Coleman. | | |
| 126, 127 C | | xiv |
| petrography.. | 213, 214 A | xiii |
| Wanapitei Lake region, petro- | | |
| graphy..... | 149 | vii |
| Windigokan Lake dist..... | 147 A | xvi |
| porphyrite | | |
| Lake Nipigon..... | 135 A | xvi |
| Nettagami river, petrography... | 141 A | xiii |
| hill, NEAR GODON LAKE, MICH- | | |
| IPICOTEN DIV., ALG. | | |
| Iron formation at base of..... | 331 A | xiv |
| mt., COLEMAN TP., NIP. | | |
| Diabase of, character..... | 27 B | xiv |
| Silver mining on..... | 86 A | xv |
| pt., GIBOUX LAKE, NIP. | 52 A | xvi |
| Diable island, BLANCHE RIVER, L. | | |
| TIMISKAMING. | | |
| Maple sugar bush on..... | 215 | xi |
| Diallage. | | |
| Definition of..... | 532 | R C |
| Parham, near..... | 197 | ix |
| Diamond, William. See Sophie gold | | |
| mine. | | |
| Diamonds. | | |
| Are there any in Ontario? paper | | |
| by Blue..... | 118-124 | ix |
| Composition of..... | 447 | R C |
| Description and mode of occur- | | |
| rence..... | 218 | vi |
| For drilling, notes on..... | 222, 223 | v |

| | Page. | Vol. | | Page. | Vol. |
|--|---------|----------|--|-------|-----------|
| Diamonds. — <i>Con.</i> | | | Dickson, Hugh | 25 | ix |
| Hardness of. | 448, | 535 R C | J. L. | 141 | x |
| | | 201 vi | | 73 | xi |
| | | 214 vii | | 65 | xii |
| Hudson Bay slope, originally in? | 8 | A xvi | Dido, F. | 48 | A xiii |
| Origin of. | 121, | 122 ix | <i>Didymla</i> | 24 | ix |
| Price of, 1893. | 170 | iv | Lyndoch tp. | 236 | vii |
| Rainy Lake dist., possibility of finding. | 73, | 74 iv | <i>Puerilla triplida</i> | | |
| Specific gravity of. | 202 | vi | Abitibi Lake dist. | 241 | A xiv |
| Diamond drills. | | | Mattagami valley. | 150 | A xv |
| Advantages, principles, cost and use of. | 221-225 | v | Dietsch kilns. | | |
| Desirability of Govt. exploiting with | 425 | R C | Notes on, and diagrams. | 128, | 129 A xiv |
| | 166 | iii | Digby tp., VICTORIA CO. | | |
| Govt. work with. <i>See</i> Government Diamond drill. | | | Magnetite in. | 202 | ix |
| Use of, in foreign countries. | 164-166 | iii | Dikes. | | |
| gold mine, MADOC TP. <i>See</i> SOPHIE GOLD MINE. | | | Barrie tp., notes on. | 219 | v |
| Jubilee gold mine, WAWA LAKE, MICHIPICOTEN DIV., ALG. | | | Difference between, and veins. | 251 | v |
| Notes on, 1898. | 146 | viii | Jackfish bay, in granite, notes. | 104 | v |
| Jubilee Mineral Development Co. | | | sketch. | 84 | v |
| Capital and date of charter. | 8, | vii | Larder Lake dist. | 205, | 220 A xvi |
| Park Mineral Water Co. | | | Laurentian system. | 249 | v |
| Capital and date of charter. | 8 | vii | Michipicoten div., diorite. | 7 | Bull iii |
| Diarsenide of nickel. <i>See</i> Chloanthite. | | | Mine Centre, near, notes on. | 279 | viii |
| <i>Dicera diaricata.</i> <i>See</i> Maple borer. | | | Mode of formation. | 230 | vi |
| Dick? | | | Nipigon Lake dist. | 131, | 132 A xvi |
| Experiments made by, on nickel steel. | 139 | ii | cutting diabase. | 134 | A xvi |
| Banning & Co. | 169, | 170 v | Ottawa co., Que., phosphate dist. | 437 | R C |
| Dickens, Charles | | | Sudbury dist. | | |
| Lakes in Rainy Lake dist. named after characters of. | 62 | iv | diabase, notes by Bell. | 434, | 435 R C |
| | 88 | vi | Coleman. | 84, | 85 C xiv |
| Dickerson, E. N. | | | granite, notes and photos. | 124, | 125 C xiv |
| Work by, on acetylene gas. | 163 | iv | Dillinger Huttenwerke Co. | | |
| Dickie, John | | | Armour plates of. | 152 | iii |
| Notes by, on Elgin silver mine. | 445 | R C | Dillon, J. | 103 | vii |
| Dickinson, James M. | | | Joseph | 55 | xii |
| Gold mining by, near Wawa. | 184, | 194 vii | Dilworth Porter & Co. | 119 | ii |
| Joseph H. | 143 | ii | Dimension stone. <i>See</i> Building stone. | | |
| Dickson, A. A. | | | Dingler, Andrew | 26, | 28 A xiv |
| Notes by, on peat manufacture. | 209, | 210 ii | Dingley tariff bill. | | |
| Peat processes of: | | | Affecting nickel. | 28 | vii |
| for fuel. | 200, | 201, | extract from evidence. | 42-45 | vi |
| | 206, | 207 ii | Dingman, Archibald W. | 152 | R C |
| diagram. | 220, | 221 xii | N. J. | 103 | vii |
| notes. | 32 | A xiii | | 101, | 103 viii |
| photos. | 208 | xii | Dinnick, C. R. S. | | |
| ref. to. | 200 | xii | Manager, Ontario Paving Brick Co. | 16 | 17 v |
| moss-litter. | 34 | iv | Plant built by, for vitrified brick. | 129 | iii |
| President, Canadian Peat Fuel Co. | 190 | vi | Dinorwic, R. R. D. | | |
| C. W. | 150 | x | Gold mining near. | 124, | 179 vii |
| Dr. C. W. | | | Route to, from Sandy lake. | 170 | vii |
| Analysis by, pentlandite. | 159 | C xiv | Soil near. | 175, | 182 vii |
| Sperrylite found by, Sudbury dist. | 162 | C xiv | (LITTLE WABIGOON) lake, R. R. D. | | |
| Views of, on Sudbury deposits. | 17 | C xiv | Gold mining on. | 97 | x |
| Work by, on Sudbury ores. | 282 | xii | Minor ref. to. | 121 | vii |
| | | | Rocks on; wild rice on. | 67 | iv |
| ref. to. | 16, | 21 C xiv | Diodorus (GEOGRAPHER) | 166 | i |
| G. H. | 150 | x | Dion, J. T. T. | 103 | vii |
| | | | | 73 | xi |
| | | | | 65 | xii |
| | | | Dion, Mary | 115 | ix |
| | | | Diopside. | | |
| | | | Madawaska river, analysis. | 197 | ix |
| | | | Diorite. | | |
| | | | Abitibi region, petrography. | 119 | A xiii |
| | | | | 211 | A xiv |

| | Page. | Vol. | | Page. | Vol. |
|---|---------|------|--|------------|------|
| Diorite. - <i>Con.</i> | | | Dobson, Alexander | | |
| Astron bay, L. of the Woods, | | | <i>See also</i> Beaverton. | | |
| petrography..... | 145 | vii | Peat bog of..... | 204 | xii |
| Belmont tp., containing gold.... | 47 | iii | fuel made by..... | 200 | xii |
| Description of..... | 532 | r c | | 25 A | xvi |
| | 234 | vi | plant, notes..... | 23 | ix |
| Foley tp., petrographical notes.. | 99 | iv | | 29, 30 A | xiii |
| Madoc, petrographical notes.... | 207 | xi | | | |
| Metamorphism of, by water, dia- | | | and diagrams. | | |
| gram..... | 189 | xi | 210-217, 222, | 223 | xii |
| Michipicoten div., dikes..... | 7 Bull. | iii | output, 1905..... | 24 A | xv |
| Port Coldwell, analysis..... | 148 | vii | photos..... | 208, 209 | xii |
| Sudbury dist., nickeliferous ores | | | President, Peat Machinery Sup- | | |
| in..... | 435 | r c | ply Co..... | 225 | xii |
| Wabigoon Lake dist..... | 183 | vii | Dodd, E. H. | 281 | xi |
| | | | | 62, 77 | xii |
| Diphophyllidae. | | | E. W. | 122 | r c |
| Paris, Ont. (near)..... | 91 B | xiii | Warren Ackerman | 122 | r c |
| Diphophyllum. | | | Dodds, P. D. & Co. | 122 | xi |
| Cayuga, N. tp..... | 146 | xii | Dodge, John S. | 75 | ix |
| " <i>archiusi</i> | | | Doc, Dennis. | 204 | iv |
| Anderdon tp..... | 125 | xi | Dog lake, Dog River, Michipicoten | | |
| " <i>arundinaceum</i> | | | DIV. | | |
| Kwataboahagan river..... | 18 A | xiii | Altitude of..... | 188, 190, | vii |
| " <i>sincoense</i> | | | Description of..... | 187 | vii |
| Cayuga, N. tp..... | 146 | xii | Fall from, to Manitowick lake... | 189 | vii |
| Hagersville..... | 145 | xii | Gold mining on, 1897..... | 136 | vii |
| Kwataboahagan river..... | 181 A | xiii | 1898..... | 101 | vii |
| Port Colborne, near..... | 35 | xi | 1901..... | 72, 95 | xi |
| Rockford and Woodstock... 143, | 148 | xii | <i>See also</i> Emily gold mine. | | |
| " <i>verruculatum</i> | | | H. B. C. post on..... | 185 | vii |
| Cayuga, N. tp..... | 146 | xii | Length of..... | 7 Bull. | iii |
| Hagersville..... | 145 | xii | Low land near, altitude..... | 9 Bull. | iii |
| Woodstock..... | 148 | xii | Minor ref. to..... | 176 A | xv |
| Disco, GREENLAND. | | | Morainic hills near..... | 192 v | xv |
| Nickel in..... | 151 c | xiv | Quartz veins on..... | 196 | vii |
| Discorbina. | | | Rocks on and near..... | 250 | v |
| Ottawa..... | 225 | x | | 188, 197 | vii |
| Diseases. | | | | 177 A | xvi |
| Among Indians..... | 178 A | xiii | granites..... | 203 | vii |
| Dishane, Fred. | 207 | iv | Huronian..... | 18 | r c |
| Disher, B. M. | 135 | i | | 124 | iv |
| Disinfectants. | | | | 253, 254 | v |
| Slaked lime for..... | 5, 13 B | xiii | schists..... | 202, 203 A | xv |
| Disley, Joseph | 26 A | xiv | Route from, to Magpie river. 294, | 295 A | xiv |
| Dismal Swamp, The, VIRGINIA AND | | | to, from Brunswick Post... 140 | | ix |
| N. CAROLINA. | | | Shape of..... | 196 | viii |
| Southern limit of peat in U. S.... | 190 | i | Striae on..... | 197 | vii |
| Disthene. <i>See</i> Cyanite. | | | lake, SHEBANDOWAN LAKE REG., | | |
| Distress river, PARRY SOUND DIST. | | | Tn. B. D. | | |
| Limestone on..... | 94 B | xiii | Forest fires near..... | 205 | v |
| Divining rod. | | | Mineral region northeast of.... | 314 | xii |
| Coal reported to be found by ... | 204 | ii | lake, STORRINGTON TP., FRON- | | |
| Foolishness of..... | 219 | v | TENAC CO. | | |
| For gold, Jaffrey tp..... | 7 Bull. | i | Barite on..... | 195 | ix |
| | 108 | vi | Iron ore on..... | 140 | r c |
| Michipicoten div..... | 80 | xii | mining. <i>See</i> Equitable mine. | | |
| Dixon -? | 80 | xii | river, L. SUPERIOR. | | |
| D J 2, 3 gold focs. <i>See</i> Manhattan | | | Beaches along..... | 175, 176 | ix |
| Gold Mg. Co | | | | 288 A | xiv |
| Dobbie, John | | | level of..... | 154, 155- | viii |
| Zinc mining by, near Chelmsford. | 33 | viii | Description of, by Coleman..... | 133 | viii |
| Dobbyn, Richard. | 25 | v | Fall of, from headwaters to L. | | |
| Dobie, James | 203 | r c | Superior..... | 286 A | xiv |
| Thomas W..... | 233 | ii | Falls on, photo..... | 168, 169 | viii |
| | 27 | iii | Indian camp near, photo..... | 298 A | xiv |
| William C. | | | Iron ore on, notes..... | 256-258 | viii |
| Gold reported by, in Bruce mines. | 37 | iii | | 160, 161 | ix |
| | | | | 322, 323 A | xiv |
| | | | mining, 1900..... | 139 | x |

| | Page. | Vol. |
|---|----------|--------|
| Dog river. — <i>Con.</i> | | |
| Jaspery ores near mouth of..... | 200 | x |
| Notes on, by J. M. Bell..... | 285 | A xiv |
| Willmott..... | 140, 141 | viii |
| Rocks on and near:— | | |
| agglomerates..... | 342 | A xiv |
| chert, pyritous..... | 314 | A xiv |
| conglomerate..... | 146, 166 | viii |
| | 203 | x |
| | 162, 167 | xi |
| | 346 | A xiv |
| greenstone..... | 302 | A xiv |
| Huronian..... | 348 | A xiv |
| phyllites..... | 343-345 | A xiv |
| notes..... | 307 | A xiv |
| Route from, to Frances mine..... | 289, 290 | A xiv |
| Lake Michi-biju..... | 291, 292 | A xiv |
| Sand-bar at mouth of, photo..... | 168, 169 | viii |
| Striae on and near..... | 288 | A xiv |
| direction..... | 178, 179 | ix |
| Whitefish in..... | 297 | A xiv |
| river, SHEBANDOWAN LAKE | | |
| REG., TH. B. D. | | |
| Forest fires near..... | 205 | v |
| Old trade route N. of..... | 199, 200 | v |
| River harbour, L. SUPERIOR. | | |
| Agglomerates north of..... | 342 | A xiv |
| Phyllites on..... | 307 | A xiv |
| Route from, to L. Michi-biju..... | 292 | A xiv |
| Dogden peat bog, GREENLAW, SCOT- | | |
| LAND | 187 | i |
| Dog-fly lake, MANITOU LAKE DIST., | | |
| R.R.D. | | |
| Rocks near..... | 63 | iv |
| Dog-paw rapid, WHITEFISH LAKE, | | |
| MANITOU LAKE DIST., R.R.D. | 59 | viii |
| Doherty, Edward | 66 | A xv |
| R. J. | 103 | vii |
| Doidge, Alfred E. | 80 | viii |
| | 51, 52 | vii |
| Doig & Co. | 99 | B xv |
| Dokis, Henry | 200 | A xiv |
| Dokis creek, ABITIBI DIST. | | |
| Description of..... | 200 | A xiv |
| Soil from near, analysis..... | 246 | A xiv |
| clay loam..... | 235 | A xiv |
| peat..... | 209 | A xiv |
| Dolberg, R. | 199 | xii |
| Dolerite. | | |
| Abitibi dist., petrography..... | 116, 117 | A xiii |
| Description of..... | 532 | R C |
| Dollar Bay, Houghton co., Mich. | | |
| Copper smelter at..... | 22 | xi |
| Dollerie house, CRIEFF, SCOTLAND | 218 | i |
| Dolliver, Jonathan S. | 42 | vi |
| Dolly Varden siding, HALTON CO. | | |
| Limestone quarry at, photo..... | 48, 49 | B xiii |
| Dolomite. | | |
| <i>See also</i> Pearl spar. | | |
| Abitibi river..... | 187 | viii |
| Addington co., Sheffield tp..... | 27, 62 | B xiii |
| As a building-stone..... | 135, 136 | iii |
| As flux for iron ores..... | 479 | R C |
| Association of, with gypsum and | | |
| salt..... | 119, 120 | B C |
| Black bay, L. Superior..... | 100 | i |
| | 112 | B xiii |

Dolomite.—*Con.*

| | Page. | Vol. |
|--|---------------|--------|
| Brant co., Paris..... | 15 | B xiii |
| Carbon di-oxide made from..... | 5 | B xiii |
| Cockburn island..... | 79 | B xiii |
| Composition of..... | 223 | vi |
| Crystals of, occurrences..... | 198 | ix |
| Description of..... | 532 | R C |
| Determination of..... | 205 | vi |
| Essex co., Anderdon tp..... | 123, 124 | xi |
| | 41, 42 | B xiii |
| Geneva lake..... | 29 | B xiii |
| Great Huronian belt, notes by | | |
| Bell..... | 81, 82 | i |
| Grey co., Owen Sound..... | 48 | B xiii |
| Haldimand co..... | 52-56 | B xiii |
| Oneida..... | 15 | B xiii |
| Halton co., Limehouse, analysis..... | 58 | B xiii |
| Nassagaweya tp..... | 58 | B xiii |
| Hastings co., associated with ac- | | |
| tinolite..... | 52 | R C |
| Madoc tp., analysis..... | 62 | B xiii |
| gold in..... | 28 | R C |
| Lake of the Woods, gold in..... | 105 | vi |
| Lambton co., oil areas..... | 153 | R C |
| Lanark co..... | 71 | B xiii |
| Larder lake, photo..... | 213, 215 | A xvi |
| with gold..... | 207, 208, 221 | A xvi |
| Lincoln co., Grimsby, analysis..... | 75 | B xiii |
| Manitoulin island..... | 76 | B xiii |
| Pigeon lake, Montreal river..... | 82 | B xiii |
| Pine lake, Kenogami river, petro- | | |
| graphy..... | 210 | x |
| Renfrew co., McNab tp., analysis..... | 105 | B xiii |
| Ross tp..... | 103 | B xiii |
| analysis..... | 100 | B xiii |
| Timagami lake, with quartz..... | 169 | x |
| Timiskaming lake..... | 85 | B xiii |
| Victoria co., Cobocok, analysis..... | 114 | B xiii |
| Wanapitei river..... | 83 | B xiii |
| Welland co., Niagara Falls..... | 194 | ii |
| Thorold (near)..... | 117 | B xiii |
| Wellington co..... | 121 | B xiii |
| Eramosa river..... | 120 | B xiii |
| Galt (near)..... | 115 | B xiii |
| Puslinch tp., analysis..... | 122 | B xiii |
| Wentworth co., Ancaster, anal- | | |
| ysis..... | 125 | B xiii |
| Hamilton..... | 13 | B xiii |
| Dolphin (FOSSIL). <i>See</i> <i>Bebuga catodon.</i> | | |
| Domanski, Isaac | 25 | ix |
| Domenizucchi, Pietro | 49, 57 | xi |
| Domeykite (ARSENICAL COPPER). | | |
| Michipicoten island..... | 194 | ii |
| | 181 | ix |
| Port Arthur dist..... | 55, 58 | B xiv |
| Silver islet..... | 444 | R C |
| | 198 | ix |
| Dominick, Gaudense | 25 | A xiv |
| Dominion Cement-Brick Co. | | |
| Capital and date of charter..... | 24 | A xiv |
| Cobalt Mg. and Development | | |
| Co. | | |
| Capital and date of charter..... | 29 | A xvi |
| Gold Mg. and Reduction Co. | | |
| <i>See also</i> Black Jack gold mine. | | |
| Gold Hill..... | " | |
| Golden Gate..... | " | |
| Golden Slipper..... | " | |

| | Page. | Vol. | | Page. | Vol. |
|--|-------------------|------|---|--------------|------|
| Dominion Gold Mg. and Reduction Co.—<i>Con.</i> | | | Domnarfoet, near FALUN, SWEDEN. | | |
| Absorbed by Keenora Mg. and Milling Co. | 96 | xii | Iron smelting at | 483, 484 | R C |
| Capital, officers and objects. | 173, 174 | v | Don, YORK TP., YORK CO. | | |
| Plant of, notes by Blue. | 187, 188 | v | Hudson River formation at | 5 B | xv |
| under option to Upton. | 88 | ix | analyses. | 8 B | xv |
| Properties of, notes on. | 174, 176 | v | river, L. ONTARIO. | | |
| Rabbit Mt. mine. | 96 | viii | Beach on, Iroquois. | 230 A | xiii |
| ..... | 85 | ix | Brick-clay on, analysis. | 127 | iii |
| Work by, 1896. | 47, 50, 107, 109, | | Frie. | 13 B | xv |
| 251, 252, 258, 259 | vi | | notes by Gibson. | 126 | iii |
| 1897. | 37, 111 | vii | works on | 104, 105 | i |
| 1898. | 98 | viii | ..... | 127 | iii |
| 1900. | 89, 92 | x | 111, 112 B | xv | |
| Improvement and Development Co. | | | Bridges across, stone for | 80 | R C |
| Capital and date of charter. | 26 A | xv | Hudson River shale on. | 177 | i |
| Formation of | 86 A | xiv | Tufa beds in | 126 B | xiii |
| Mica mining by, N. Burgess tp. | 105 A | xv | Valley Pressed Brick Co. | | |
| ..... | 88 A | xvi | Brick-works of, analysis of clay. | 8 B | xv |
| iron mine, MADOC TP., HASTINGS CO. | | | notes. | 29 | xii |
| Chert and hornblende banded in. | 141 | xi | 111, 112 B | xv | |
| Erythrite in | 198 | ix | paving brick. | 14, 15 | vi |
| ..... | 60 B | xiv | Donald, Prof. J. T. | | |
| Smaltite in | 209 | ix | Analyses and assays by, of:— | | |
| lake, W. OF L. OF BAYS, R.R.D. | | | hog-iron ores, Radnor Forges. | 26 | ii |
| Laurentian near, in contact with granite. | 172 | vii | graphite, Brougham tp. | 30 | v |
| Sand-bank on, curious. | 173, 174 | vii | limestone, Renfrew. | 105 B | xiii |
| Timber near. | 181 | vii | ore from Denison tp. | 105 | R C |
| Mineral Co. | | | Gold mountain mine examined by | 187 | v |
| <i>See also</i> Blezard nickel mine, Worthington " | | | Notes by, on asbestos. | 95, 97 | iii |
| Cobalt production of, 1893. | 3 A | xiii | Donaldson, W. | | |
| Matte of, analysis. | 154 | ii | Gypsum mining by. <i>See</i> Mount Healey. | | |
| Mines of, accidents at | 167, 176 | iii | Doney, John. | 212 | iv |
| gabbro in, petrography. | 78 | i | Donnegann lake, N. OF ONAPING LAKE, ALG. | | |
| notes by Bell. | 433 | R C | Gold on. | 187 | x |
| richer in depth. | 153 | ii | Donnelly, J. P. | 103 | viii |
| Not included in International Nickel Co. | 22 | xi | John. | 46, 50 | x |
| Smelting works erected by. | 435 | R C | mica mine, N. BURGESS TP., LANARK CO. | | |
| Work by, Sudbury dist. | xxiii | R C | Notes on. | 130 | xii |
| 217, 248 | ii | | Producing, 1903. | 12 A | xiii |
| 185 | iii | | Donovan, H. A. | 115 | ix |
| Blezard mine. | 254, 286 | xii | J. | 141 | x |
| 56, 142 C | xiv | | 65 | xii | |
| Natural Gas Co. | | | 48 A | xiii | |
| Capital and date of charter. | 24 A | xiii | Doon, WATERLOO TP., WATERLOO CO. | | |
| Operating in Attercliffe field. | 91, 105 A | xiv | Onondaga formation at. | 115 B | xiii |
| Towns supplied by, list of. | 25 A | xvi | Doran, John | | |
| Dundas and Hamilton. | 106 A | xiv | Discovery by, of oil, Dawn tp. | 18, 19 | vii |
| Nickel Co. | 26 | vii | William | 174 | iii |
| Oil Co. | | | Dore conglomerate. | | |
| Capital and date of charter. | 5 | xii | Age, description and distribution of. | 155, 162-167 | xi |
| Peat Products. | | | Michipicoten div. | 300 A | xiv |
| Capital and date of charter. | 5 | xii | distribution. | 343-346 A | xiv |
| Peat bog of, Newington, notes on. | 208, 209 | xii | photo. | 343 A | xiv |
| Plant of, 1902. | 223 | xii | and petrography. | 340-346 A | xiv |
| Portland Cement Co. | | | Position of, in Huronian. | 174 A | xv |
| Capital and date of charter. | 11 | xi | lake, DORÉ RIVER, L. SUPERIOR. | | |
| Sewer Pipe Co. | | | Granite and greenstone on, petrography. | 176, 178 | xi |
| Operating, 1906. | 19 A | xvi | Length of. | 285 A | xiv |
| Works of, Swansea, notes and photo. | 117, 118 B | xv | Rocks near | 348 A | xiv |
| | | | (or Pickerel) river, L. SUPERIOR. | | |
| | | | Canoe navigation on | 285, 289 A | xiv |
| | | | Coast from, to Gros Cap | 153 | xi |

| | Page. | Vol. | | Page. | Vol. |
|---|------------------------|------|---|------------|------|
| Dore river. — <i>Con.</i> | | | Douglas pt., BRUCE CO. | | |
| Copper mining on | 206 | vii | Rocks at and near | 35, 66 B | xiii |
| Islands south of, composition .. | 144 | viii | Douro tp., PETERBORO CO. | | |
| Notes on, by Coleman | 132 | viii | Cement works in. <i>See</i> Lakefield. | | |
| Rocks on and near | 345 A | xiv | Limestone in | 97 B | xiii |
| conglomerate | 144, 146 | viii | Marl in. <i>See</i> Buckley lake. | | |
| | 183 | ix | Dove lake, RENFREW CO., ONT. | | |
| | 191, 203 | x | Trenton formation on. | 104 B | xiii |
| | 155, 162, 163-165, 180 | xi | Dover tp., KENT CO. | | |
| hornblende-schists | 181 | xi | Oil well in, log of. | 110, 111 A | xiv |
| Huronian | 158 | viii | Dowagiac, MICHIGAN. | | |
| notes by Coleman. 164-167 | | viii | Diamond found at | 121 | ix |
| Dorion Lead and Zinc Co. | | | Dowling, D. B. | | |
| Capital and date of charter. | 24 A | xiv | Ref. to surveys by :— | | |
| silver mine, DORION TP., TIT. | | | Lac Seul' region. | 53, 54 | v |
| B. D. | | | | 158 | vii |
| Galena in | 198 | ix | Lake Nipigon | 105 A | xvi |
| Sphalerite in | 209 | ix | tp., SUDBURY DIST., ALG. | | |
| tp., TH. B. D. | | | Farm land in | 105 C | xiv |
| Gold mining in. <i>See</i> Ogema g. m. | | | Rocks in, nickel eruptive. | 196, 198 A | xiii |
| Jasper and dolomite quarry in. | 100 | i | | 68 C | xiv |
| Lead in | 59 A | xiii | <i>See also</i> Onaping. | | |
| mining, 1903 | S7 A | xiii | Windy lake. | | |
| veins, notes by Bell. | 37, 38 | R C | Downey, J. | 59 | ix |
| Limestone quarry in | 112 B | xiii | L. | 103 | viii |
| Zinc in | 59 A | xiii | | 115 | ix |
| mining | 11 A | xiii | | 141 | x |
| Dorway, F. C. | 65 | xii | | 73 | xi |
| Douai, DEPT. DU NORD, FRANCE. | | | | 48 A | xiii |
| School of mines at | 498 | R C | M. | 73 | xi |
| Double portage, MISSISSAUGA RIVER, | | | mill, WELLAND CANAL. | 30 | v |
| ALG | 195 | viii | rapid, HUNGERFORD TP., HAST- | | |
| Doucet, Th. | 210 | ii | INGS CO. | | |
| Douglas, A. | 177 | vii | Gold at | 54 | iii |
| | 145, 146 | viii | tp., PERTH CO. | | |
| E. A. | 115 | ix | Limestone quarry in. <i>See</i> Selater, J. | | |
| | 138, 141 | x | Downing, H. F. | | |
| E. V. | | | Gold mining by :— | | |
| Director, Algoma Steel Co. | 98 | xi | Comstock g. m. | 86 | vii |
| Licence to | 115 | ix | for Toronto and Western | | |
| Part owner, waterpower, Sault | | | Dev. Co. | 67 | viii |
| Ste. Marie | 6 | ix | Last Chance g. m. | 269 | vi |
| President, Consolidated Lake Su- | | | Ophir g. m. | 90 | ix |
| perior Co. | 92 | xi | Dowrie, R. | 103 | vii |
| J. | 48 | ix | | 115 | ix |
| J. W. | | | Dowsley, G. W. O. | 65 | xii |
| Licence to | 115 | ix | Doyle, Kate | 73 | xi |
| | 73 | xi | | 65 | xii |
| | 65 | xii | T. P. | | |
| | 48 A | xiii | Gold prospecting by, Anzhekum- | | |
| Manager, Kitchi-gammi g. m. | 47 A | xiii | ming lake. | 85 | vi |
| Manxman g. m. | 64, 80 | xii | Michipi- | | |
| James | | | coten div. | 141 | x |
| Copper smelting by, 1876 | 377 | R C | | 73 | xi |
| Lacey & Co. | 84 A | xv | | 48 A | xiii |
| Lord, OF HAWICK | 38, 125 | viii | and Co. | | |
| P. | 103 | vii | Silver mining by, Cobalt. | 78 A | xv |
| | 115 | ix | Dragon-fly. | | |
| S. | 103 | vii | Rainy River dist | 97 | iv |
| co., OREGON. | | | lake, NIPIGON LAKE REG., TH. | | |
| Garnierite in | 214 | vi | B. DIST. | | |
| Nickel ores in | 146 C | xiv | Rocks near | 119 A | xvi |
| Douglas, BROMLEY TP., RENFREW CO. | | | Drainville, Joseph. | 30 | vii |
| Trenton formation at | 104 B | xiii | Drake, Col. | | |
| island, ALASKA. | | | First gas well sunk by, Titusville, | | |
| Treadwell gold mine on | 27 | R C | U. S. | 157 | i |
| Mining Co. | | | | | |
| Capital and date of charter | 29 A | xvi | | | |

| | Page. | Vol. | | Page. | Vol. |
|---|-----------------|------|--|----------|------|
| Drake, Elias | | | Drummond, Thomas J. | 17 | ix |
| Copper mining by, Mississagi river | 148 | viii | (See also Drummond McCall & Co.) | 30 | x |
| Death of | 239 | ii | W. B. | 63 A | xiii |
| Owner, West End silver mine | 227 | i | McCall & Co. | | |
| "Drake" H. M. S. | | | Canada Iron Furnace Co. organized by | 25 | ii |
| Mica boiler covering used in | 25 | x | Sales agent for Canada Iron Furnace Co. | 17 | ix |
| Draper, F. E. | 75 | viii | island, L. HURON, U. S. | | |
| Dreany, A. | 103 | vii | Limestone from, analysis | 13 B | xiii |
| H. | 115 | ix | Mines, Ltd. | | |
| Dredging for gold. | 103 | vii | Close corporation | 13 A | xvi |
| Plant for, description | 259 | vii | Shipping, 1905 | 15 B | xvi |
| marl. | | | Working, 1906 | 8 A | xvi |
| Plant for, photo | 153 A | xiv | silver mine, COLEMAN TP., ONT. | | |
| Drew, T. F. | | | Notes on, 1905 | 81, 83 A | xv |
| Iron prospecting by, Ground-hog river | 315, 317 | xii | Photos of | 82 A | xv |
| Mining in Michipicoten div. | 103 | vii | Producing, 1905 | 7 A | xv |
| | 103 | viii | tp., LANARK CO. | | |
| | 115 | ix | Bog iron ore in | 137 | R C |
| | 141 | x | Labradorite in | 200 | ix |
| Drew, MINTO TP., WELLINGTON CO. | | | Limestone in | 46 | ii |
| Brick yards in, notes on | 105 B | xv | Peat bog in. See Perth. | | |
| Drewry, George | | | Drummondville, GRANTHAM TP., DRUMMOND CO., QUE. | | |
| Gold prospecting by, Camp bay | 102 | vi | Blast furnace at | 329 | R C |
| Drift. | | | | 27-29 | ii |
| Notes on, by Bell | 48-52 | R C | Drury Nickel Co. | | |
| Driftwood creek, MATTAGAMI RIVER, ALG. | | | Capital and date of charter | 8 | vii |
| Description of, by Kerr | 122, 123 A | xv | Inez mine bought by | 144 c | xiv |
| river near | 121 A | xv | See also Trill Mining Co. | | |
| Granite bosses east of | 134 A | xv | Re-formed into Trill Mg. and Mfg. Co. | 276 | vi |
| Timber on and near | 142, 145, 146 A | xv | tp., SUDBURY DIST., ALG. | | |
| river, BLACK RIVER, ABITIBI RIVER. | | | Clay-slates in | 73 | i |
| Dimensions of; driftwood on | 109 A | xiii | Cobalt in ores of | 166 | ii |
| Ducks on; marshes on | 124 A | xiii | Copper in | 24, 106 | R C |
| Notes on, by Parks | 183 | viii | Galena in | 203 | R C |
| Rocks on, dolerites | 116 A | xiii | Gold mining in. See Dwyer g.m. | | |
| porphyritic | 120 A | xiii | Lepidomelane in | 201 | ix |
| Trees on | 115, 124, 126 A | xiii | Morenosite in | 205 | ix |
| Drilling. | | | Nickel mining in. See Inez mine. | | |
| Photo of hand contest in | 96, 97 | xii | Worthington mine. | | |
| Driver, J. | 103 | viii | Pentlandite in | 206 | ix |
| | 115 | ix | Polydymite in | 207 | ix |
| John | | | Rocks in, granite | 69 | i |
| Illness of | 242 | v | nickel-bearing | 276 | xii |
| Notes by, on iron-pyrites, Big river | 255, 256 | v | | 30 c | xiv |
| | 181 A | xvi | norite | 242 | xii |
| Work by, 1895 | 241, 243 | v | "Dry bone." See Calamine. | | |
| Drobiansky, URAL, RUSSIA. | | | Dry lake, HUNGERFORD TP., HASTINGS CO. | | |
| Iron smelting at | 487 | R C | Marl in | 109 | i |
| <i>Drosera rotundifolia</i> (FOSSIL). | | | | 137 A | xiv |
| Ottawa near | 225 | x | Dryberry lake, L. OF THE WOODS REG., R. R. D. | | |
| Drugs. | | | Gold near | 103 | vi |
| Bismuth for | 234 | vii | river, DRYBERRY LAKE, R.R.D. | | |
| Drummond, George E. | 17 | ix | Rocks near mouth of | 103 | vi |
| | 30 | x | Dryden, VAN HORNE TP., R. R. D. | | |
| (See also Drummond, McCall & Co.) | | | Agricultural land near | 175, 182 | vii |
| H. A. | 116 | ix | Dam at, built by Govt. | 121, 125 | vii |
| John J. | | | Gold near, mining, 1898 | 77 | vii |
| Manager, Canada Iron Furnace Co. | 25 | ii | | 59 A | xvi |
| | 30 | x | 1906 | 51 A | xiv |
| Midland iron works planned by | 17 | ix | prospecting, 1904 | 51 A | xiv |

| | Page. | Vol. |
|---|----------|------|
| Dryden, VAN HORNE TP.—Con. | | |
| Gold near, prospecting, 1905.... | 55 A | xv |
| Iron ore near..... | 309 | xii |
| <i>See also below</i> —Rocks. | | |
| Polp mill at. | 14 A | xv |
| Rocks near, iron bearing.... | 136, 137 | xi |
| ..... | 220 A | xiii |
| petrographical notes. | 145 | xi |
| falls, WANAPITEI RIVER, NIP. | | |
| Waterpower at..... | 13 A | xv |
| tp., NIP. | | |
| Fibrolite in..... | 198 | ix |
| Waterpower in..... | 10 A | xiv |
| <i>Dryobates pubescens.</i> <i>See</i> Woodpecker, downy | | |
| " <i>villosus.</i> <i>See</i> Wood pecker, hairy. | | |
| Dryweed island, RAINY LAKE, MINN. | | |
| Gold mining on..... | 63 | v |
| Dualin. | | |
| Sulphuric acid in manufacture of. | 193 A | xvi |
| Use of, in Sudbury dist..... | 169 | iii |
| Dublin, HIBBERT TP., PERTH CO. | | |
| Boring at, for salt..... | 54 | R C |
| Dublin, IRELAND. | | |
| Apatite shipments to, 1884-85 .. | 443 | R C |
| Dubray, A. | 103 | vii |
| Dubroy, James | 236, 239 | v |
| Dubuque. | | |
| Brick paving of..... | 113 | iii |
| Duchon, Edward | 30 | vii |
| Duck. | | |
| Abitibi region..... | 189 | xii |
| ..... | 126 A | xiii |
| Driftwood river.. | 121 A | xiii |
| Hinterland, The..... | 133 | iv |
| Michipicoten div..... | 200 A | xv |
| Mississagi river..... | 172 | xii |
| Moss tp..... | 121 | v |
| Night-hawk lake..... | 193 | viii |
| Niven's base line and S. of..... | 142 | ix |
| Rainy Lake dist..... | 97 | iv |
| berry. | | |
| Abitibi dist..... | 241 A | xiv |
| Deer rapid, ABITIBI RIVER. | | |
| <i>See</i> Buck-deer rapid. | | |
| lake, MICHIPICOTEN DIV., ALG. | | |
| Huronian rocks on..... | 348 A | xiv |
| lake, SHEBANDOWAN LAKE REG., TIL. B. D. | | |
| Notes on, by Blue..... | 118 | v |
| Route from, to Huronian mine .. | 125 | v |
| lake, NEAR VERMILION LAKE, TIMAGAMI DIST., NIP. | | |
| Jaspilite near..... | 170 | x |
| Ducktown, POLK CO., TEN. | 456 | R C |
| Dudley, H. D. | 103 | viii |
| tp., HALIBURTON CO. | | |
| Apatite in..... | 173 | R C |
| Dudleyville, TALLAPOOSA CO., ALA. | | |
| Corundum at..... | 242 | viii |
| ..... | 194 | ix |
| Dudswell Marble and Lime Co. | | |
| Lime output of, 1887..... | 82 | R C |
| Duff, John | | |
| Report by, on peat in Sweden... .. | 218 | ii |
| George | | |
| Iron mining by, Madoc tp | 31 | viii |
| J. A. | | |
| Fossils found by, Payne river... .. | 219 | x |

| | Page. | Vol. |
|---|------------|------|
| Duffett—? | 172 | ii |
| Dufferin, Marquis of | | |
| Consular report by, on peat industry in France..... | 212 | ii |
| co. | | |
| Boring in, for coal..... | 43, 45 A | xiii |
| Limestone in, notes by Miller.... | 39 B | xiii |
| Cobalt Silver Mg. Co. | | |
| Capital and date of charter | 29 A | xvi |
| iron mine, MARMORA TP., HAST- INGS CO. | | |
| Idle, 1884-91..... | 237 | i |
| Notes on, 1900..... | 128, 129 | x |
| Dufresne, Louis | 47 | x |
| Dugal, Pete | 38 A | xiv |
| Dulhut, Daniel | | |
| Historical notes..... | 196-198 | v |
| Du Lievre river. <i>See</i> Lièvre river. | | |
| Dulmage, George | | |
| Gold prospecting by, L. of the Woods..... | 21 | iii |
| Manager, Gold Hill mine..... | 232 | ii |
| Duluth, MINN. | | |
| Annikie series near..... | 66 | R C |
| Copper in coarse gabbro of..... | 87 | iii |
| Nomenclature..... | 197 | v |
| Railway from, through R. R. d., suggested..... | 241, 242 | R C |
| Trade of | 241 | R C |
| Cobalt Mining Co. | | |
| Capital and date of charter..... | 28 A | xvi |
| Mining Co. | | |
| Capital and date of charter..... | 9 | viii |
| Work by, Seine River dist..... | 76 | ix |
| ..... | 105 | x |
| Dumfries, VIRGINIA. | | |
| Pyrites mining near..... | 192 A | xvi |
| N. tp., WATERLOO CO. | | |
| Guelfh formation in..... | 33, 115 B | xiii |
| Marl in..... | 149 | xii |
| ..... | 115, 116 B | xiii |
| S. tp., BRANT CO. | | |
| Brick making in. <i>See</i> Harrisburg. | | |
| Marl in | 33, 149 | xii |
| ..... | 34 B | xiii |
| <i>See also</i> Blue lake. | | |
| Dummer tp., PETERBORO CO. | | |
| Barite in | 195 | ix |
| Chalcopyrite in | 196 | ix |
| Dumond, S. | 103 | vii |
| Dun, Finlay | 116 | xi |
| Duncan, A. G. | | |
| Evidence by, before R.C. <i>re:</i> mineral lands..... | 309 | R C |
| Vermilion Mining Co..... | 113 | R C |
| R. K. | | |
| Notes by, on uses of acetylene... .. | 33 | v |
| W. G..... | 142 | vii |
| Prof. Wyndham R. | | |
| Notes by, on quality of Canadian mica..... | 135 | x |
| silver mine. <i>See</i> Shumiah silver mine. | | |
| Dunchurch, HAGERMAN TP., P. S. D. | | |
| Country north of, character | 169 | ix |
| Dundas, PROTON TP., GREY CO. | | |
| Beach at, altitude..... | 176 | ix |

| | Page. | Vol. | | Page. | Vol. |
|--|--------------|--------|---|--------|--------|
| Dundas, FLAMBOROUGH TP., WEST-WORTH CO. | | | Dunnett, S. C. | 141 | x |
| Gas in, boring for..... | 152 | R C | tp., Nip. | | |
| piped to..... | 91, 106 | A xiv | Prospecting in..... | 40 | A xvi |
| | 23 | A xv | Dunning's mills, CUMBERLAND TP., RUSSELL CO. | | |
| Limestone near, notes on..... | 124, 125 | B xiii | Cambro-Silurian at..... | 108 | B xiii |
| Medina shale at..... | 43 | R C | Dunnville, MOULTON TP., HALD-MAAND CO. | | |
| Traverstine at, crystalline..... | 91 | B xiii | Artesian wells in..... | 62 | i |
| bay, NEAR HAMILTON. | | | Dam near, on Grand river..... | 198 | iii |
| Brick-clay near..... | 238 | A xiii | Gas at and near..... | 39 | xii |
| Mammoth remains at..... | 229 | A xiii | 22, 23 | A xiii | |
| cape, BRUCE CO. | | | 105, 106 | A xiv | |
| Clinton and Medina formation at. | 35 | B xiii | notes, 1890..... | 137 | i |
| co | | | supplied to..... | 91 | A xiv |
| Limestone in, notes by Miller.. | 39 | B xiii | <i>See also</i> following refs. | | |
| river, WEST-WORTH CO. | | | Limestone quarry at..... | 101 | i |
| Beach on, raised..... | 28 | B xv | Gas Development Co. | | |
| street, LONDON, ONT. | 60 | i | Capital and date of charter..... | 29 | A xvi |
| Dunderland Iron Ore Co. | 331 | xii | Mutual Natural Gas Co. | | |
| Dundonald tp., Nip. | | | Capital and date of charter..... | 25 | A xv |
| Porphyritic rocks in..... | 120 | A xiii | Natural Gas Co. | | |
| Dundum park, HAMILTON. | | | Notes on, 1890..... | 137 | i |
| Gravel beach in..... | 228 | A xiii | Dunphy, John | 24 | viii |
| Dune. See Sand dune. | | | Duntroon, NOTTAWASAGA TP., SIMCOE CO. | | |
| Dunedin, NEW ZEALAND | | | Limestone quarry near, analysis. | 110 | B xiii |
| Mining school at..... | 221 | iv | Dunwich Gas and Oil Co. | | |
| Dunganon tp., HASTINGS CO. | | | Capital and date of charter..... | 9 | xii |
| Andradite in..... | 193 | ix | tp., ELGIN CO. | | |
| Biotite in..... | 195 | ix | Erie clay in. <i>See</i> Port Talbot. | | |
| Cancrinite in..... | 196 | ix | Oil in, discovery..... | 19 | vi |
| Corundum in..... | 217-220, 244 | viii | notes by Blue..... | 15 | viii |
| Graphite in..... | 199 | ix | Dupont Gold Mg. Co. | | |
| Hastingsite in, analysis..... | 199 | ix | Capital and date of charter..... | 9 | ix |
| Iron in, magnetite..... | 202 | ix | Dupuis, Nathan F. | 216 | i |
| Mining. <i>See</i> Mineral Range Iron | | | Durahamel, Edwrd. | 30 | vii |
| Mg. Co. | | | Durango state, MEXICO. | | |
| Lepidomelane in..... | 201 | ix | Cobalt minerals in..... | 71 | B xiv |
| Molybdenite in..... | 205 | ix | Durham, T. S. | 61 | x |
| Muscovite in..... | 205 | ix | Durham, BENTINCK TP., GREY CO. | | |
| Nepheline-syenite in..... | 198 | vi | Cement works at..... | 32 | xi |
| 226-229 | vii | | 18 | B xiii | |
| 217-220 | viii | | 17 | A xv | |
| 213 | xi | | suggested..... | 17 | x |
| notes by Coleman..... | 252 | viii | <i>See also</i> National Portland Ce- | | |
| Perthite in..... | 206 | ix | ment Co. | | |
| Pyrrhotite in. <i>See</i> Turriff. | | | Limestone quarries near..... | 50 | B xiii |
| Railway through, for iron devel- | | | co. | | |
| opment..... | 61 | ii | Brick yards in, notes..... | 61, 62 | B xv |
| Sodalite in..... | 225 | vi | Limestone in, notes by Miller... | 40 | B xiii |
| 209 | ix | | co., ENGLAND. | | |
| exhibited at World's Fair. | 188 | ii | Coal in, royalties on..... | 17 | i |
| Dunite. | | | creek, FENNISKILLEN TP., LAMB-TOX CO. | | |
| Appalachian mts..... | 242 | viii | Oil on, boring for..... | 25 | v |
| New Caledonia..... | 69 | B xiv | Natural Gas and Oil Co. | | |
| Dunkard creek. | | | Capital and date of charter..... | 11 | xi |
| Natural gas and oil near..... | 141 | i | Portland Cement Co. | | |
| Dunlop, G. | 174 | v | Capital and date of charter..... | 9 | x |
| W. W. | 65 | xii | Dusseldorf, GERMANY. | | |
| Dunn, B. W. | 67 | A xvi | Peat experiments at..... | 219 | xii |
| C. B. | 103 | viii | Du Toits Pan diamond mine, | | |
| | 116 | ix | KIMBERLEY, S. AFRICA..... | 122 | ix |
| John | | | Duties. See Tariffs. | | |
| Iron mining by, Madoc tp..... | 32 | viii | Dutton, DUNWICH TP., ELGIN CO. | | |
| Michipicoten | | | Oil at..... | 17 | x |
| div..... | 103 | vii | 90 | A xiii | |
| Mrs. M. | 74 | xi | boring for..... | 108 | A xiii |
| iron mine, MENOMINEE RANGE, | | | | | |
| Mich..... | 146 | iii | | | |

| | Page. | Vol. | | Page. | Vol. |
|---|----------|--------|---------------------------------------|---------------|--------|
| Dutton, DUNWICH TP.--<i>Con.</i> | | | Eagle, Wis. | | |
| Oil at, production, 1905..... | 108 | A XV | Diamonds at..... | 120 | ix |
| 1906..... | 24 | A XVI | Copper Co. | | |
| Peat-bogs near..... | 191 | i | Capital and date of charter..... | 38 | A xiii |
| Dwyer, John | 276 | vi | Copper mine, GOULAIS BAY, L. | | |
| See also Dwyer gold mine. | 58 | xii | SUPERIOR. | | |
| gold mine, DRURY TP., ALG. | | | Notes on, 1904..... | 62 | A xiv |
| Notes on..... | 87, 88 | vii | island, STONY LAKE, PETER- | | |
| Mining Co. | | | BOROUGH CO. | | |
| Capital and date of charter..... | 29 | A xvi | Granite quarry on..... | 212 | viii |
| Dyckie, Maggie AND J. G. | 103 | viii | lake, FRONTENAC CO. | | |
| 115, 116 | ix | | Apatite on..... | 46 | ii |
| 141 | x | | mining..... | 172 | R C |
| 73 | xi | | 240 | i | |
| 65 | xii | | 228 | viii | |
| 48 | A xiii | | suspended..... | 251 | ii |
| Dyeing. | | | See also Blessington | | |
| Lime used in..... | 3 | B xiii | mines. | | |
| Dyer--? (1826) | 17 | ii | Corundum-bearing rocks near .. | 228 | viii |
| William | | | Iron ore on, magnetite..... | 47 | ii |
| Limestone quarry of, Brockville | | | titanic..... | 337 | xii |
| 72, | 73 | B xiii | Limestone on..... | 46 | ii |
| Dyment station, R. R. D. | | | underlying iron ore.. | 48 | ii |
| Gold mining near. See Sakoosé | | | lake, MANITOU LAKE REG., | | |
| mine. | | | R. R. D. | | |
| Railroad from, to Sakoosé mine . | 101 | x | Gold on and near..... | 230 | iv |
| Town-site of, surveyed..... | 72 | viii | mining, 1900..... | 95, 96, 146 | x |
| Dymer, William | 34, | 35 | 1901..... | 243, 244 | xi |
| Dymond and Abitibi Mg. and De- | | | 1902..... | 49, 92, 93 | xii |
| velopment Co. | | | 1903..... | 64, 65 | A xiii |
| Capital and date of charter..... | 25 | A xv | 1904..... | 31 | A xv |
| tp., Nip. | | | 1905..... | 47, 53-55, 66 | A xv |
| Brick-clay in. See New Liskeard. | | | 1906..... | 59 | A xvi |
| Diabase in..... | 5 | B xiv | See also Manhattan g. m. | | |
| with erythrite..... | 28 | xiv | Map of district of..... | With Vol. iv | |
| Dynamite. | | | Railway from, to Elizabeth lake, | | |
| Inferior quality of, danger from. | 78 | xii | suggested..... | 59 | viii |
| Sulphuric acid for..... | 193, 197 | A xvi | lake, MICHIGOTEN DIV., ALG. | | |
| Use and abuse of, paper on.. | 284-287 | v | Character of Dog river near..... | 285 | A xiv |
| Works for, near Brockville..... | 152 | A xvi | Length of..... | 292 | A xiv |
| D'Youville, Rev. Mother | 162 | v | Lake Gold Mg. Co. | | |
| Dysart tp., HALIBURTON CO. | | | Capital and date of charter..... | 38 | A xiii |
| Apatite in..... | 173 | R C | Photo of mill-approach of..... | 96, 97 | x |
| 194 | ix | | Work by, 1900..... | 95 | x |
| Grenville series in..... | 56 | B xiii | Nest Gold Mg. Co. | | |
| Iron mining in. See Haliburton. | | | Capital and date of charter..... | 8 | vii |
| Dyscrasite. | | | Situation of claim of, work by.. | 56, 57 | vi |
| Cobalt dist..... | xi, | 98 | river, ENGLISH RIVER, R. R. D. | | |
| 13 | A xiii | | Iron ore on..... | 145 | R C |
| Coleman tp..... | 13 | B xiv | river, L. SUPERIOR, TH. B. D. | | |
| formula..... | 12, | 23 | Description of lake shores near.. | | |
| Dysinger, Charles M. | 48 | A xiii | Rocks near mouth of: | | |
| 59 | A xiv | | conglomerate..... | 166 | viii |
| Dysyntribite. See Agalmatolite. | | | 167 | xi | |
| | | | photos..... | 348-352 | A xiv |
| | | | quartz mass..... | 351 | A xiv |
| | | | (Ontonoggon) river, L. Su- | | |
| | | | PERIOR, U.S. | | |
| | | | Copper on..... | 63 | iii |
| | | | Eagle, A. S. | 190 | ix |
| | | | Earl, J. | 103 | viii |
| | | | Earle, Ellis P. | 5, 40 | A xiv |
| | | | Earsenian, W. A. | 149 | i |
| | | | Earth, The | | |
| | | | Chemical composition of crust of. | 447 | R C |
| | | | Definition of crust of..... | 532 | R C |
| | | | Temperature of, increase in | | |
| | | | depth..... | 54 | i |
| | | | Earthy cobalt. See Asbolite. | | |

| | Page. | Vol. | | Page. | Vol. |
|---|-----------|----------|---|-----------------|------|
| East bay, STURGEON LAKE, TH. B. D. | | | Ebenezer mine, NEAR GOLDEN, B.C. | | |
| Nepheline-syenite near..... | 87 | xii | Cinnabar in..... | 211 | vii |
| *East End silver mine, SILVER MT., TH. B. D. | | | Eberts and Johnson. | | |
| Acquired (1901) by Consolidated | | | Gold prospecting by, near Mid- | | |
| Mines of L. Superior..... | 19, 256 | xi | dleton..... | 82 | vii |
| | 96 | xii | Eby tp., NIP. | | |
| English capital in..... | 196, 199, | R C | Divided into farm lots, 1902..... | 173 | xii |
| Labour employed at, 1898..... | 280 | viii | Geology of, notes by Bolton..... | 175-180 | xii |
| Notes on, 1891..... | 228 | i | Rocks in, petrographical notes... | 189 | xii |
| 1897..... | 83, 84 | vii | Eccles, G. H. | 103 | vii |
| 1898..... | 96 | viii | | 103 | viii |
| by Bain..... | 275 | viii | Ida | 116 | ix |
| Harvey..... | 428 | R C | | 141 | x |
| Merritt..... | 193 | R C | creek, ECCLES LAKE, MICHIGI- | | |
| Trethewey..... | 201 | R C | COTEN DIV., ALG. | | |
| India Co., The Hon. | | | Iron claims near..... | 332 A | xiv |
| Methods of, compared to those of | | | lake, MICHIGI-COTEN DIV. ALG. | | |
| H. B. C..... | 201 | v | Iron claims on..... | 315, 332, 333 A | xiv |
| Lexington, MIDDLESEX CO., MASS. | | | Rocks near..... | 307, 343 A | xiv |
| Peat-fuel factory at..... | 28 A | xiii | Ecclesiastes. | | |
| New York iron mine, ISHPEM- JING, MICH. | | | Quotation from..... | 74 B | xiv |
| Boring in, cost of..... | 232 | v | Echinodermata. | | |
| Palestine, COLUMBIANA CO., OHIO. | | | Anderdon tp..... | 125 | xi |
| Paying clay from, analysis..... | 120 | iii | Echo. | | |
| Toronto Brick Co. | | | Shoal lake, Seine river, notes by | | |
| Capital and date of charter..... | 24 A | xiii | Blue..... | 155 | v |
| Eastern Canada Oil Co. | | | bay, McDONALD TP., ALG. | | |
| Capital and date of charter..... | 37 A | xiii | Chalcopyrite at..... | 196 | ix |
| Development Co. | 236 | i | Farming industry at..... | 197 | viii |
| Mining Syn. | | | Limonite from, shewn at World's | | |
| Capital and date of charter..... | 8 | vii | Fair..... | 82 | ii |
| Townships, The, QUE. | | | bay, SHOAL LAKE, L. OF THE | | |
| Anthraxolite in..... | 5, 6 | Bull. ii | WOODS. | | |
| Asbestos in, quality..... | 97 | iii | Copper pyrites on..... | 49 | v |
| Glaciation in, direction of..... | 49 | R C | Gold mining on and near..... | 68 | viii |
| Nickel in..... | 150 C | xiv | | 59 | ix |
| Roofing slates of, ref. to..... | 73 | i | <i>See also</i> Daunais, Oliver. | | |
| Townships Mfg. and Dev. Co. | | | Nonesuch g. m. | | |
| Capital and date of charter..... | 8 | vii | Limestone on, crystalline..... | 49 | v |
| Gold mining by, near Dryden... | 77 | vii | | 101 | xi |
| | 42, 75 | viii | Huronian..... | 82 | i |
| Easthope S. tp., PERTH CO. | | | lake, N. OF L. HURON, ALG. | | |
| Brick making in. <i>See</i> Stratford. | | | Bismuth near..... | 195 | ix |
| Eastman Springs. See Carlsbad Springs. | | | Copper on..... | 88 | R C |
| Eastnor tp., BRUCE CO. | | | map: mining..... | 91, 92 | R C |
| Medina and Clinton formation in. | 35 B | xiii | prospecting..... | 97 | R C |
| Easton, F. W. | 87 | ix | Fault from, to Mississagi river... | 39 | iii |
| Judson | | | Geology of vicinity..... | 123, 124 | viii |
| Limestone quarry of, Brockville. | | | Glacial striae on, direction..... | 157 | viii |
| | 72, 73 B | xiii | Iron ore on, at World's Fair... | 80 | ii |
| Robert | 149 | xii | hematite..... | 143 | R C |
| | 116 B | xiii | specular..... | 64 | ii |
| Corners, WOLFORD TP., GREN- VILLE CO. | | | Lead and silver mining on, notes | | |
| Calcliferous formation at..... | 47 B | xiii | by Skewes..... | 147 | R C |
| quarry, NEAR BROCKVILLE. | | | Marble on..... | 68 | R C |
| Limestone from, analysis..... | 72, 73 B | xiii | | 31 B | xiii |
| Eaton—? | | | notes by Merritt..... | 76 | R C |
| Plumbago working by, MacCue.. | 181 | R C | Snow..... | 83 | R C |
| Eauclaire, CALVIN TP., NIP. | | | Rocks on and near..... | 274, 275 A | xiv |
| Mica mining in..... | 195 | iii | conglomerate..... | 185 | ix |
| | | | | 187 | x |
| | | | Huronian..... | 159, 160 | viii |
| | | | petrography..... | 170 | viii |
| | | | photos..... | 152, 153 | viii |
| | | | quartzite..... | 92 C | xiv |
| | | | Stibnite on..... | 210 | ix |
| | | | lake, RENEW CO. | | |
| | | | Application made to divert water of. | 20 | ix |
| | | | | 131 | x |

*Also known as Shuniah Weachu.

| | Page. | Vol. | | Page | Vol. |
|---|--------|------|---|------------|------|
| Echo Lake Mg. Co. | | | Edison, Thomas A.—<i>Con.</i> | | |
| Capital and date of charter..... | 11 | xi | Explorations for, Sudbury dist.. | 289 | xii |
| river, NEAR GARDEN RIVER, | | | 55, 211 A | xiii | |
| ALG. | | | 10 A | xiv | |
| Iron ore near mouth of..... | 188 | x | 15, 55, 111, 144 c | xiv | |
| Notes on, by Coleman..... | 124 | viii | Magnetic separator of, description. | | |
| Eckardt, A. J. H. | 85, 86 | x | 348, 349 | R C | |
| Eckford quarry, NEAR ARTHUR. | | | 328, 329 | xii | |
| Analysis of limestone from...105, 106 B | xiii | | ref. to...339, 340 | xii | |
| Eckstein Bros. | 122 | xi | separation of pyrrhotite | | |
| Ecole Centrale des Arts et Manu- | | | by.....164, 165 | ii | |
| factures. | 498 | R C | Notes by, on treatment of | | |
| des Maitres Mineurs. | | | impure magnetic iron ores.... | 89 | ii |
| Notes on, by Royal Com..... | 498 | R C | Visit of, to Sudbury..... | 82, 89 | xi |
| des Mines. | | | 49 | xii | |
| Notes on, by Royal Com..... | 497 | R C | Edith Furnace Co. | | |
| Polytechnique. | 499 | R C | Labour employed by, statistics.. | 370 | R C |
| Economic geology. | | | Edmison, Dr. Albert Henry | 49 | vii |
| Notes on a museum of.....522-524 | R C | | Edmondson, E. S. | 214 | v |
| Gold and Nickel Pyrite | | | "Edna Brydges" ss....47, 51, 166, | 168 | v |
| Smelting Co. | | | gold mine, ANZIEKUM- | | |
| Capital and date of charter..... | 8 | vii | MING LAKE, R.R.D. | | |
| Minerals. | | | Notes on, 1897. | 122 | vii |
| Paper, by Hardy, on the smelt- | | | Edward, A. C. | 164 | R C |
| ing of.....319-388 | R C | | Cobalt Mines, Ltd. | | |
| Gas Apparatus Construction | | | Capital and date of charter..... | 28 A | xvi |
| Co. | | | Edward island, L. SUPERIOR. | | |
| Merrielfield gas generator con- | | | Arsenic (native) from..... | 86 | v |
| structed by..... | 228 | xii | Silver mining on..... | 202 | R C |
| Eczema. | | | 188 | v | |
| Arsenic for..... | 61 | iii | Edwards, Clark | 20 | ix |
| EDB 1 gold loc., NEAR DRYDEN, R. | | | 131 | x | |
| R. D. | 55 A | xv | 249 | ii | |
| 59 A | xvi | | Frederick. | | |
| Eddystone lighthouse, OFF PLY- | | | Henry, W. | | |
| MOUTH, ENGLAND. | | | In charge of smelter, Murray | | |
| Lime for, analysis..... | 107 | i | mine..... | 231 | i |
| Eden, BAYHAM TP., ELGIN CO. | | | 246 | ii | |
| Guelph formation at..... | 121 B | xiii | Leaves Murray smelter..... | 247 | iv |
| Edey, M. C. AND R. W. | | | Notes by, on processes at Murray | | |
| <i>See also Edey Gold Mg. Co.</i> | | | mine..... | 188 | iii |
| Iron claims of, M'chipicoten div. | 316 A | xiv | R. M. | 507 | R C |
| folding in..... | 340A | xiv | furnace. | | |
| notes by J. M. Bell..... | 337 A | xiv | For pyrites ores..... | 194 A | xvi |
| Licence to..... | 103 | vii | tp., NIP. | | |
| 103 | viii | | Rocks in..... | 210 A | xiv |
| 116 | ix | | Soil in..... | 232, 246 A | xiv |
| 141 | x | | muskegs.....187, 203, | 209 A | xiv |
| 74 | xi | | requires drainage..... | 207 A | xiv |
| 65 | xii | | Trees in..... | 232 A | xiv |
| 48 A | xiii | | Edwardsburg tp., GRENVILLE CO. | | |
| Manager for Edey Gold Mg. Co.. | 112 | ix | Calceiferous formation in. <i>See</i> | | |
| Gold Mining Co......112, 113, 116 | ix | | Cardinal. | | |
| Edgar, William | 30, 31 | viii | Eel creek, STONY LAKE, PETERBORO | | |
| Thomson iron works, NEAR | | | CO. | | |
| PITTSBURG. | | | Peristerite in..... | 206 | ix |
| Bessemer steel made at..... | 365 | R C | Rocks in valley of..... | 213 | viii |
| Labour employed by, cost of.... | 370 | R C | Effingham, Earl of | 22 | i |
| Edgewood island, L. HURON. | | | tp., ADDINGTON CO. | | |
| Minerals and rocks of..... | 109 | R C | Mica in..... | 203 | ix |
| Edginton station, CANADA ATLANTIC | | | mining, 1891.....244, 245 | i | |
| R'y. | | | 1892..... | 249 | ii |
| Mica mining at..... | 98 | vii | <i>See also Mazinawe lake.</i> | | |
| Edison, Thomas A. | | | Eganchute, EGAN CREEK, YORK | | |
| Battery perfected by, employing | | | BRANCH RIVER. | | |
| cobalt for generating..... | 11 A | xv | Syenite near..... | 219 | viii |
| Cobalt prospecting for, Bay lake. | 87 A | xv | Waterpower of..... | 220 | viii |
| Correspondence between, and | | | Egan farm, YORK BRANCH RIVER. | | |
| S. Ritchie......108, 109 | ii | | 218, 219 | viii | |

| | Page. | Vol. | | Page. | Vol. |
|---|----------|------|---|---------------|------|
| Eganville, GRATIAN TP., RENFREW CO. | | | Eldorado, MADOC TP., HASTINGS CO. | | |
| Iron mining near..... | 16 A | xvi | Country north of, character..... | 232 A | xiii |
| See also Radnor iron m. | | | Copper smelter at..... | 89 A | xv |
| Mining class at, 1896..... | 197 | vi | See also Eldorado copper mine. | | |
| Sphene at, notes on..... | 209, 210 | ix | Gold mining near. See Richard-son g. m. | | |
| Trenton formation at..... | 104 B | xiii | Growth of..... | 54 | iii |
| Eggs. | | | Mispickel near..... | 199 | xi |
| Lime used for preserving..... | 3, 13 B | xiii | (OR Medina) copper mine, MADOC TP., HASTINGS CO. | | |
| Egleston, Dr. Thomas | | | Notes on..... | 76 A | xvi |
| Notes by, on iron smelting..... | 476, 480 | R C | Plant of, photos..... | 77 A | xvi |
| mining schools..... | 418 | R C | Producing, 1906..... | 15, 16 A | xvi |
| Egmondville, TUCKERSMITH TP., HERON CO. | | | Pyrite in, underlying hematite . | 182 A | xvi |
| Pottery at, photo of..... | 119 B | xv | gold mine, EAGLE LAKE, MANITOU LAKE DIST., R. R. D. | | |
| Egypt. | | | Notes on, 1900..... | 96, 97 | x |
| Brick of the treasure cities in.... | 107 | iii | 1902..... | 93 | xii |
| mortar for, character..... | 12 B | xiii | 1903..... | 65 A | xiii |
| British methods in..... | 9 | iv | 1904..... | 49 A | xiv |
| Cobalt glass made in..... | 69 B | xiv | 1905..... | 53 A | xv |
| Einigkeit shaft, JOACHIMSTHAL, BOHEMIA..... | 63 B | xiv | Operating, 1906..... | 59 A | xvi |
| Einigl, Anton | 207 | i | Photos of..... | 64, 65 A | xiii |
| Eissenickelkies. See Pentlandite. | | | 54 A | xv | |
| Ekfrid tp., MIDDLESEX CO. | | | Mg. Co. | | |
| Oil and salt in. See Glencoe. | | | Capital and date of charter..... | 25 A | xiv |
| Ekinu creek, EAGLE LAKE, MICHIGI- COTEN DIV., ALG. | | | Operating..... | 4, 49 A | xiv |
| Rocks near mouth of..... | 348 A | xiv | 53 A | xv | |
| lake, Dog RIVER. See Eagle lake. | | | 65 | xii | |
| Ekman, Gustav | 208 | ii | 48 A | xiii | |
| Peat kiln of..... | | | Eldridge, R. C. | 180, 181, 185 | v |
| El Diver gold mine, NEAR ROSSLAND, ONT. | | | "Eleanor" ss. | 180, 181, 185 | v |
| Minor ref. to..... | 109 | vi | lake, MICHIGICOTEN DIV. | | |
| Notes on, 1892..... | 234, 235 | ii | Galeua near..... | 153 | xi |
| by Blue..... | 29, 30 | iii | Gold prospecting near..... | 195 | vii |
| Rocks of..... | 69 | iv | Pleistocene deposits near..... | 184 | xi |
| contact Huronian-Laurentian.. | 110 | vii | Rocks on and near..... | 157 | ix |
| Elæolite. See Nepheline. | | | 158-161, 166, 179, 182 | xi | |
| syenite. See Syenite, nephe- line | | | Iron formation..... | 256 | viii |
| Elba, island of | | | notes by Coleman.. | 160 | xi |
| Iron ore of, exported to Baltimore. | 400 | R C | Siderite near..... | 196, 201 | x |
| Gt. Britain..... | xx | R C | Striae east of, direction..... | 178 | ix |
| quality..... | 472 | R C | slates (LOWER HURONIAN). | | |
| Petalite in..... | 472 | R C | Description and occurrences of | | |
| Elba Iron and Continental Tube Co. | | | 155, 158 | xi | |
| Labour employed by, statistics... 370 | | R C | Michipicoten div., Goetz claims.. | 181 A | xv |
| Elhers, A. D. | | | Notes on, by J. M. Bell..... | 300, 301 A | xiv |
| Patent by, for smelting iron ore . | 331 | xii | Petrography of..... | 181, 182 | xi |
| Elbow lake, R. R. D. | | | Position of, in L. Huronian..... | 174 A | xv |
| Boulders on, notes..... | 90 | v | Electric apparatus. | | |
| Rocks on, Laurentian..... | 73 | v | Mica for..... | 86 A | xvi |
| stockworks..... | 52 | iv | cables. | | |
| Shape of; forest fires on..... | 139, 140 | v | Peat for isolating..... | 215 | ii |
| pt., STEEP-ROCK LAKE, R. R. D. | | | = Mercurial Amalgamator and Mining Co. | | |
| Iron ore near..... | 7 | iv | Capital and date of charter..... | 8 | vii |
| Elderslie tp., BRUCE CO. | | | railways. | | |
| Brick-yard in. See Paisley. | | | Advantages of, as opposed to steam..... | 133 | v |
| Dolomites in, bedded..... | 36 B | xiii | smelting. | | |
| Eldon tp., VICTORIA CO. | | | For aluminium, notes by Rich-ards | 173 | i |
| Peat bog in. See Kirkfield. | | | For iron ores..... | 349-351, 477 | R C |
| Trent Vall y | | | For nickel..... | 158, 159 | ii |
| Peat Fuel Co. | | | notes by Levat..... | 156 | ii |
| | | | Electro Chemical Co. | | |
| | | | Formation of, reasons for..... | 91 | xi |
| | | | = Gas Co. | 161 | iv |

| | Page. | Vol. | | Page. | Vol. |
|---|--------------------|-------------|---|--------------|-------------|
| Electro-Gold gold mine, JAFFRAY TP., R. R. D. Notes on, 1899..... | 37 | ix | Elizabethtown tp., LEEDS CO.—<i>Con.</i> Marine deposits in. <i>See</i> Lyn. Peat bog in. <i>See</i> Brockville. Pyrrhotite in..... | 207 500 A | ix xvi |
| -plate. Nickel for..... | 145, 146 | ii | Siderite in..... | 209 | ix |
| Elements. Notes on, by Copp..... | 447 | R C | Steatite in; tale in..... | 210 | ix |
| Elephant. Remains of near Hamilton..... | 229 A | xiii | Elk (WAPITI). Desjardins canal (remains)..... | 229 A | xiii |
| lake, S. OF ENGLISH RIVER, R. R. D. Geology of vicinity..... | 163 | vii | lake, MONTREAL RIVER, NIP. Magnetic attraction on..... | 74 C | xiv |
| Pleistocene deposits near..... | 173 | vii | Shape of, conforms to rocks..... | 202 A | xiii |
| Spruce near..... | 181 | vii | | 73 C | xiv |
| Elftman, Dr. Manager for Parry Sd. Copper Mg. Co. | 259-261 164-167 | viii ix | Ellen lake, MICHIGICOTEN DIV., TH. B. D. Country north of, character..... | 281 A | xiv |
| Notes by, on copper deposits, Carling tp..... | 168 | ix | Rocks near..... | 349 A | xiv |
| Elgin, Lord Bruce Mines called after..... | 96 | R C | Doiré conglomerate..... | 346 A | xiv |
| Minor refs. to..... | 173 | ii | Ellice tp., PERRH CO. Peat bog in. <i>See</i> Brunner. | 21, 24 | vi |
| | 126 | vi | Elliott, Alexander | 136 | R C |
| Elgin, S. CROSBY TP., LEEDS CO. Limestone in, notes by Miller... Mica mining near..... | 41 B 89 A | xiii xvi | Edward | 275 | v |
| co. Brick yards in, notes on..... | 62, 63 B | xv | Eli Brickyard of, Thedford..... | 8 B | xv |
| Hamilton formation in..... | 25 B | xiii | Wingham..... | 71 B | xv |
| Natural gas in..... | 29 | v | J. Quarry of, photo..... | 96, 97 B | xiii |
| notes and borings..... | 108, 109 A | xiv | producing, 1892..... | 28 | xii |
| Oil in, industry, 1898..... | 15, 17 | xiii | M. M. Sandstone quarrying by, Caledon tp..... | 74, 79 | R C |
| notes and borings..... | 108, 109 A | xiv | | 99 | i |
| Peat in..... | 209 | ii | R. | 11 B | xv |
| silver mine, JACKFISH BAY, L. SUPERIOR. Notes on, by Dickie..... | 445 | R C | R. J. Manager, Crown Point mine.... Paymaster mine..... | 61 A 54 A | xiii xiv |
| Owned by Canadians..... | 199 | R C | | 52 A | xv |
| Silver Mining Co. Capital and date of charter. | 8 | vii | W. C. | 33, 149 | xii |
| Elgiafield Oil and Gas Developing Co. Capital and date of charter..... | 8 | vii | | 18, 34 B | xiii |
| Work by, Dunwich tp..... | 15, 16 | viii | and Sons. Brick works of, Sault Ste. Marie, etc..... | 57, 58 B | xv |
| Dutton field..... | 108 A | xiv | Saugeen clay for. | 20 B | xv |
| Eliza Furnace Co. Labour employed by, statistics.. | 370 | R C | and Sons. (TORONTO). Map by, of Ontario, for Pan- American Exhibition..... | 84 | xi |
| Elizabeth bay, MANITOULIN ISLAND, ALG. Niagara formation near..... | 79 B | xiii | falls, GULL RIVER. Water power from..... | 33 | xii |
| Copper Mg. Co. Capital and date of charter..... | 25 A | xv | | 17 A | xiii |
| gold mine, RICE LAKE, NEAR STEEP-ROCK LAKE. Accident at..... | 39 A | xiii | | 18 B | xiii |
| Closed..... | 52 A | xiii | | 157 A | xiv |
| Discovery of; expenditure on..... | 40, 41 | x | Ellis,—? | 79 A | xiv |
| Mill erected at..... | 15 | xii | A. St. George | 243 | xi |
| Notes on, 1900..... | 40, 41 | x | C. E. Paper by, on armour plates..... | 149-158 | iii |
| 1901, 15, 16, 133, 150, 240, 241 | xi | | Douglas | 44 A | xv |
| 1902..... | 15, 82 | xii | John Devonshire Evidence of, <i>re</i> royalties in Gt. Britain..... | 22, 23 | i |
| Outcrop of, photos..... | 240, 241 | xi | P. W. Hungerford quarries controlled by..... | 235 | R C |
| Elizabethtown tp., LEEDS CO. Caoxenite in..... | 195 | ix | | 87 | xi |
| Cobalt in..... | 196 | ix | Dr. W. Hodgson Analysis by, of anthraxolite.... | 4 Bull. | ii |
| with iron pyrites..... | 60 B | xiv | | 95 C | xiv |
| Hisingerite in..... | 199 | ix | ref. to..... | 124 | ix |
| Iron pyrites in..... | 207 | ix | rock from near Vermilion lake..... | 133 C | xiv |
| mining..... | 149-153 A | xv | | | |

| | Page. | Vol. | | Page. | Vol. |
|--|------------|------|--|-----------|------|
| Ellis, Dr. W. Hodgson — <i>Con.</i> | | | Elmsdale, PERRY TWP., P. S. D. | | |
| Experiments by, on runs of the | | | Gold claims in; tourmaline in... | 172 | ix |
| Merrifield gas generator..... | 228 | xii | Elmsley tps., LANARK AND LEEDS | | |
| Nagyagite reported by, Huronian | | | CON. | | |
| g. m..... | 106 | v | Apatite in | 176 | R C |
| Notes by, on peat treated by the | | | | 194 | ix |
| Dickson process..... | 201 | i | works in. <i>See</i> Smith's | | |
| Paper by, on chemical composi- | | | Falls. | | |
| tion of anthraxolite..... | 4 Bull. | ii | Graphite in | 181 | R C |
| Professor of Applied chemistry, | | | | 196 | iii |
| Toronto..... | 215 | i | <i>See also</i> McConnell mine. | | |
| Tests by, on peat..... | 207 | ii | McCue. | | |
| carbonization process. <i>See</i> | | | Iron ore in | 138 | R C |
| Harvey steel. | | | limonite..... | 201 | ix |
| quarry, BAY OF QUINTE. | | | Limestone in | 102 B | xiii |
| Limestone from, analysis..... | 65, 66 B | xiii | Loganite in | 201 | ix |
| Ells, Dr. R. W. | | | Marl in | 73 B | xiii |
| Asbestos defined by..... | 94 | iii | | 121 A | xiv |
| Paper by, on peat industry in | | | Mica mining in | 290 | xi |
| Canada..... | 195-200 | ii | Sandstone in, for building | 80 | R C |
| Ref. to brochure by, on marl | | | Tourmaline in | 211 | ix |
| deposits..... | 121 A | xiv | <i>Elodea canadensis.</i> | | |
| Ref. to work by, Hastings dist.. | 208 | vii | Ottawa (near)..... | 225 | x |
| | 215 | viii | Elora, NICHOL TWP., WELLINGTON CO. | | |
| Ottawa valley. 216, 222 | | x | Guelph formation at..... | 45 | R C |
| 22, 37 B | xiii | | | 121 B | xiii |
| bend, SOWESKA RIVER, MISSIS- | | | Lime-kilns at | 14 A | xiii |
| SAUBI RIVER. | | | | 122 B | xiii |
| Lignite at, map showing..... | 165 A | xiii | Elphinstone, Hon. Mountstuart W. | 174 | v |
| Notes on, by J. M. Bell..... | 166 A | xiii | Lord | 174 | v |
| peninsula, L. OF THE WOODS, | | | gold mine, SHOAL LAKE NAR- | | |
| R. R. D. | | | ROWS, L. OF THE WOODS. | 174 | v |
| Granite on..... | 102 | vi | Elsberg peat process. | 194 | i |
| Elm. | | | Elsie gold mine, NEAR KENORA, R. | | |
| As fuel, calorific power..... | 54 B | xv | R. D. | | |
| Batchawana valley..... | 200 | viii | Notes on 1897..... | 110 | vii |
| Blanche river..... | 215 | xi | junction, McKIM TWP., NIP. | | |
| Fort Frances..... | 161 | v | Norite near, photo..... | 79 c | xiv |
| Frederick House Lake dist..... | 124 A | xiii | nickel mine, McKIM TWP., SUD- | | |
| Hudson Bay slope..... | 121 | iv | BURY DIST. | | |
| Mississagi river..... | 161, 172 | xii | Accident at, 1902..... | 46 | xii |
| Rainy Lake dist..... | 96 | iv | Boring plant purchased by..... | 42 A | xiii |
| Rainy river..... | 117 | iv | Notes, on 1901..... | 281, 282 | xi |
| | 207, 208 | v | 1902..... | 123, 287 | xii |
| American or swamp | | | Production..... | 144 c | xiv |
| Abitibi Lake dist..... | 242 A | xiv | Pyrites crystals in..... | 281 | xii |
| Michipicoten div..... | 295 A | xiv | cubes..... | 158 c | xiv |
| Moose River basin..... | 176 A | xiii | Ore deposits of, character, ... | 278, 279 | xii |
| white | | | connected with | | |
| Abitibi dist..... | 126 A | xiii | Murray deposits. 20 c | xiv | |
| Elma, WILLIAMSBURG TWP., DUNDAS | | | Rocks in and near:— | | |
| CO. | | | greenstone..... | 81 c | xiv |
| Fossils in..... | 91 B | xiii | photo..... | 51 c | xiv |
| tp., PERRY CO. | | | granite..... | 83, 124 c | xiv |
| Cement in. <i>See</i> Western Ont. | | | malachite masses..... | 76 c | xiv |
| Portland Cement Co. | | | norite..... | 114 c | xiv |
| Fossils in, on surface..... | 95 B | xiii | petrography..... | 108 c | xiv |
| Marl in..... | 162 A | xiv | notes by Coleman..... | 50-52 c | xiv |
| Elmo creek, KABENUNG LAKE, MICH- | | | pillow structure..... | 60 c | xiv |
| IPICOTEN DIV. | | | Work by, 1901..... | 20 | xi |
| Canoe route on..... | 292, 293 A | xiv | Worked by L. Superior Power Co. | 143 c | xiv |
| Rocks on..... | 315, 330 A | xiv | Elvan. | | |
| lake, MICHIPICOTEN DIV. | | | Definition of..... | 533 | R C |
| Minor ref. to..... | 293 A | xiv | Elvins, Andrew | 67 | iii |
| Rocks on..... | 315 A | xiv | Elvo, NEAR BIELLA, PIEDMONT, ITALY. | | |
| Iron formation..... | 330 A | xiv | Nickel in auriferous sands of.... | 151 c | xiv |
| Elmore process. | | | | | |
| Advantages of..... | 11 A | xiv | | | |

| | Page. | Vol. | | Page. | Vol. |
|---|----------|--------|---|---------------|--------|
| Ely, A. C. | | | Emeri cape, NAXOS ISLAND, ÆGEAN SEA. | | |
| See also Ely iron mine. | | | Emery called after | 533 | R C |
| Analysis of ore from claim of.... | 193 | x | Emerson Co. | | |
| Iron and gold mining by, Michi- | | | Oil producing, 1896..... | 24 | vi |
| picoten div..... | 254, 258 | viii | Emery. | | |
| 113, 116, 156 | | ix | See also Corundum. | | |
| 139, 141 | | x | Asia minor..... | 242 | viii |
| 74, 168 | | xi | Definition of..... | 533 | R C |
| Ely, NEAR TOWER, MINN. | | | 217 | vi | |
| Iron mining at..... | 124, 126 | R C | Greece and Turkey..... | 62 | vi |
| notes by Coleman.. | 152 | ix | Nomenclature..... | 523 | R C |
| See also Chandler | | | Price of, 1898..... | 238 | viii |
| mine. | | | United States, Chester..... | 62 | vi |
| range, compared with Michi- | | | 213 | vii | |
| picoten range..... | 175 | xi | 242 | viii | |
| greenstone (VERMILION SERIES). | | | statistics.. | 218, 249, 250 | vii |
| Description of..... | 272 | A xiv | 237 | viii | |
| Section of (theoretical)..... | 124 | R C | mill. | | |
| Similarity of, to Gros Cap green- | | | For cement making, illustrations | | |
| stone..... | 156 | xi | and notes..... | 131 | A xiv |
| Vermilion dist., U. S..... | 301 | A xiv | wheels. | | |
| iron mine, IRON LAKE, MICH- | | | Manufacture of, notes on..... | 38 | xi |
| PICOTEN DIV., ALG. | | | Wheel Works, PROVIDENCE, | | |
| Notes on, 1901..... | 71, 72 | xi | R. I. | | |
| Elzevir Mining and Development | | | Notes by, on corundum from | | |
| Co. | | | Raglan tp..... | 240 | viii |
| Capital and date of charter..... | 9 | viii | Emily gold mine, DOG LAKE, MICH- | | |
| tp., HASTINGS CO. | | | PICOTEN DIV. | | |
| Actinolite in..... | 52, 86 | R C | Boring on..... | 62 | xi |
| 192 | | ix | Idle, 1903..... | 47 | xiii |
| 27 | | xi | Minor ref. to..... | 294 | A xiv |
| notes..... | 91, 92 | iii | Morainic hills near..... | 192 | A xv |
| See also Actinolite, Ont. | | | Notes on, 1901..... | 95 | xi |
| Antholite in..... | 193 | ix | 1902..... | 71 | xi |
| Asbestos mining in..... | 92 | A xiii | by Coleman..... | 187 | A xv |
| stopped, reason for.. | 87 | A xiv | Ore of, character..... | 95 | xi |
| Geology of, notes by Miller.. | 199, 200 | xi | iron mine, TUDOR TP., HAST- | | |
| Gold in..... | 28 | R C | INGS CO. | | |
| prospecting..... | 92 | vii | Andradite in..... | 193 | ix |
| Granite in..... | 200 | xi | Iron ore from, at World's Fair.. | 82 | ii |
| Indicolite in..... | 200 | ix | Mispickel in..... | 105 | xi |
| Iron ores in..... | 39, 40 | ii | Rocks of..... | 57 | ii |
| hematite..... | 55 | ii | Enlaw, H. S. | 239 | xi |
| 199 | | ix | Emm bay, CROW LAKE, R. R. D. | 89 | xi |
| Marble from, white..... | 62 | B xiii | Emma Abbott gold mine, LOWER | | |
| Mispickel in..... | 103 | xi | SEINE RIVER DIST. | | |
| Talc in..... | 99 | iii | Felsite schists in..... | 262 | viii |
| mining..... | 9 | iii | Notes on, 1898..... | 274 | viii |
| Steatite in..... | 210 | ix | 1899..... | 75 | ix |
| Embrum, RUSSELL TP., RUSSELL CO. | | | Abbott Gold Mg. Co. | | |
| Trenton limestone near..... | 107 | B xiii | Capital and officers..... | 75 | ix |
| Embury, W. J. | 38 | A xv | lake, CAUREOL TP., NIP. | | |
| 48 | A xvi | | Strike of..... | 202 | A xiii |
| Emerald apatite mine, BUCKINGHAM | | | lake, CREIGHTON TP., NIP. | | |
| TP., OTTAWA CO., QUE. | | | Huronian schists on..... | 46 | iii |
| Pockets in, showing banded | | | Nickel-bearing eruptive on..... | 38 | c xiv |
| structure..... | 441 | R C | Emmens, Prof. S. H. | | |
| Pyroxenite in..... | 437 | R C | New (?) minerals discovered by, | | |
| lake, HUNTER ISLAND, R. R. D. | | | Sudbury dist..... | 281 | xii |
| Iron prospecting on, evidence | | | description of same..... | 192 | ii |
| before Royal Com..... | 125, 126 | R C | 160 | c xiv | |
| lake, OPIMIKA CREEK, NIP. | | | whartonite named by..... | 211 | ix |
| Dolomite on..... | 169 | x | Notes by, on peat for:— | | |
| Iron ore on and near..... | 201 | x | tuel for steamers..... | 203 | i |
| 315 | A xiv | | gas..... | 210 | i |
| Marl in..... | 122 | A xiv | iron-smelting..... | 208 | i |
| analysis..... | 88 | B xiii | | | |
| Notes on, by Barlow..... | 87 | B xiii | | | |
| Quartz from, assay of..... | 180 | x | | | |

| | Page. | Vol. | | Page. | Vol. |
|--|-----------------|------|--|---------------|------|
| Emmens, Prof. S. H. <i>Con.</i> | | | Empress Tilbury Oil and Gas Co. ... | 97 A | xvi |
| Papers by, on:— | | | | 17 | vii |
| constitution of nickeliferous | | | Enamel Paint Co. | 122 | xi |
| pyrrhotite..... | 163-166 | ii | Enamels | | |
| new sources of Platinum..... | 179, 180 | ii | Analysis of venetian | 120 | xi |
| some new nickel minerals .. | 167-170 | ii | <i>Energetes</i> | | |
| Ref. to report by, on Geology of | | | Nassagaweya tp | 57 B | xiii |
| N. Y..... | 31 | ii | Thorold | 117 B | xiii |
| Views of, on origin of apatite | | | <i>Energetus nervos.</i> | | |
| deposits | 438 | R C | Lac Seul..... | 92 | v |
| Metal Co. | | | <i>Enegetum praeatum.</i> | | |
| Nickel refined by..... | 131 | ii | Ottawa (near)..... | 225 | x |
| Work by, at Macdonnell mine... | 179 | ii | Endemann, H. | | |
| mine, McINTYRE TP., TIL. B. D. | | | Analysis by, of asphalt | 166 | vi |
| Mispickel in | 57 B | xiv | End-of-Steel, Boston TR., Nip. | | |
| Emmerson, J. T. | 116 | ix | Mining classes at..... | 50, 51 A | xvi |
| Emmons, J. | | | Energy, YORK CO., S. CAROLINA. | | |
| Gold mining by, Bag bay | 82 | ix | Corundum in | 242 | viii |
| Emory, Dr. | 37 | x | Engines. <i>See</i> Locomotives. | | |
| <i>See also</i> Middleton. | | | England, Gustavus. | 44, 45, 48 | xii |
| W. J. H. | 103 | vii | England. | | |
| Emperor gold mine, NEAR BAD | | | <i>See also</i> Great Britain. | | |
| VERMILION LAKE, R. R. D. | | | Arsenic in, mining..... | 101 | xi |
| Dikes in, notes on | 279 | viii | production, 1895-1900..... | 110 | xi |
| Mining class at, 1898..... | 281 | vii | Calcium carbide in, manufacture | | |
| Notes on, 1898 | 45, 84, 278 | viii | of | 23 | x |
| <i>Empetrum.</i> | | | Cement in, notes on manufacture | | |
| On peat bogs of Germany..... | 213 | ii | of | 106, 107 | i |
| Empey, J. M. | 235 | xii | Coal mines of, accidents in..... | 199 | iv |
| Empire Gas and Oil Co. | | | Cobalt imports of, from New | | |
| Capital and date of charter..... | 25 A | xv | Caledonia..... | 73 B | xiv |
| Limestone Co. | | | Companies in Canada run by, | | |
| Natural gas used by..... | 23 A | xv | failure of | 231 | R C |
| Operating, 1902..... | 28 | xii | Iron in, competing with Canadian | 104 | ii |
| mine, MADOC TP., HASTINGS CO. | | | Exports to U. S., 1887..... | 468 | R C |
| Tetrahedrite in | 38 | iv | Iron in, production, 1800, 1850..... | 399 | R C |
| | 210 | ix | smelting, early..... | 356 | R C |
| Mining Co. | | | furnaces, number of, | | |
| Capital and date of charter..... | 9 | ix | 1882 | 398 | R C |
| Salt Co. | | | titaniferous for armour | | |
| Capital and date of charter..... | 24 A | xiii | plates | 231 | vii |
| silver mine, PORT ARTHUR | | | Mining laws in | 285 | R C |
| DIST., TIL. B. D. | | | schools in, location of, 419, 420 | | R C |
| Animikie formation in | 226 | i | Nickel consumption in, 1895-1898..... | 215 | ix |
| Notes on | 240 | ii | for armour plate trials in .. | xxiii | R C |
| Empress Cobalt Silver Mg. Co. | | | | 197 | iv |
| Capital and date of charter..... | 28 A | xvi | <i>See also</i> British Admiralty. | | |
| (OR JACKFISH) gold mine, | | | Oil for, flash test of | 164 | R C |
| JACKFISH BAY, L. SUPERIOR. | | | Prosperity of, cause of..... | 181 | i |
| Closed down, 1897..... | 35 | vii | 1750 compared with 1890 | 367 | R C |
| 1898..... | 95 | viii | Roads of, trap employed for..... | 15 | v |
| 1900 | 87 | x | Salt from, evidence before R. C. | | |
| Depth of, 1899 | 35 | ix | | 187-191 | R C |
| Examination of, 1902, ref. to.... | 81 | xii | Streets of, brick used for paving..... | 108 | iii |
| Notes on, 1895 | 266 | v | Engledue, C. W. | | |
| 1896..... | 263-265 | vi | Manager, Ontario Limited g.m.... | 53 | vii |
| 1897..... | 80, 81, 134-136 | vii | | 68 | viii |
| 1899 | 82 | ix | Col. W. T. | | |
| by Coleman..... | 2 Bull. 1 | | Chairman, Mikado Gold Mg. Co. | 7 Bull. 1 | |
| | 85 | v | | 105, 107, 256 | vi |
| | 110, 111, 117 | vi | President, Ontario Ltd. Gold Mg. | | |
| McKellar..... | 265, 266 | vi | Co..... | 53 | vii |
| as loc, 569.... | 189, 190 | v | Purchaser, Triumph gold mine... | 97 | vi |
| Photos..... | 48, 49 | vii | Engleheart, J. L. and Co. | | |
| Road towards, built by Govt..... | 9 | vi | Oil pumping system of, at | | |
| Rocks near, petrographical notes. | 104 | v | Petrolea:— | | |
| Gold Mining Co. | | | description..... | 107 | ix |
| Formation of..... | 190 | v | photos | 112, 113 | ix |
| | 8 | vii | plan..... | 106, 107 | ix |
| and officers..... | 7, 56, 263 | vi | Views of, oil in Enniskillen tp. | 26 | v |

| | Page. | Vol. | | Page. | Vol. |
|--|----------------|--------|---|----------|--------|
| English, C. B. | 34 | xii | <i>Epilobium angustifolium</i> | | |
| James. | 127 | i | Abitibi Lake dist..... | 241 | A xiv |
| bay, L. Nipigon, TH. B. D. | | | Mattagami valley..... | 150 | A xv |
| Porphyry rock near..... | 38 | R C | " <i>coloratum</i> | | |
| Portland Cement Co. | | | Abitibi Lake dist..... | 241 | A xiv |
| Merged in Canadian Portland | | | " <i>glandulosum</i> | | |
| Cement Co..... | 136 | A xiv | Mattagami valley..... | 151 | A xv |
| Works of, erected..... | 109 | i | " <i>hornemannii</i> | | |
| river, KER. AND ONT. | | | Abitibi Lake dist..... | 241 | A xiv |
| Geology of valley of, near 4th. | | | Mattagami valley..... | 151 | A xv |
| Meridian..... | 161 | vii | Epinette river, MISSISSAUGA RIVER, | | |
| River Gold Mg. Co. | | | ALG. | | |
| Capital and date of charter..... | 9 | xii | Beavers near..... | 172 | xii |
| Producing, 1902..... | 15 | xii | Description of, by Graton..... | 168 | xii |
| Work by, Sturgeon Lake dist.... | 84 | xii | Epsomite (MAGNESIUM SULPHATE). | | |
| Ennis farm, STORRINGTON TP., FRON- | | | Occurrences..... | 193 | ix |
| TENAC CO. | | | Equador. | | |
| Iron mining in, 1899..... | 104 | ix | Nickel coinage in..... | 161 | ii |
| Enniskillen Mining Co. | | | Esquerres, Les, EAGLE RIVER, L. | | |
| Capital and date of charter..... | 9 | ix | SUPERIOR..... | 285 | A xiv |
| Mining in Michipicoten div..... | 116 | ix | <i>Equisetum limosum</i> | | |
| "..... | 66 | xii | Ottawa, near..... | 225 | x |
| tp., LAMBTON CO. | | | " <i>palustre</i> | | |
| Asphaltum in..... | 195 | ix | Abitibi dist..... | 242 | A xiv |
| Hamilton formation in..... | 47 | R C | " <i>pratensis</i> | | |
| Oil in..... | 156, 158, 159 | R C | Abitibi dist..... | 242 | A xiv |
| <i>See also</i> Oil Springs. | | | " <i>scirpoides</i> | | |
| boring for, record..... | 153, 156 | R C | Ottawa (near)..... | 225 | x |
| "..... | 113 | A xiv | " <i>gleaticum</i> | | |
| in Corniferous..... | 47 | R C | Ottawa (near)..... | 225 | x |
| notes by Blue..... | 26 | v | Equitable iron mine, DOG LAKE, | | |
| refinery works, description..... | 27 | v | FRONTENAC CO. | | |
| Portage-Chemung formation in... | 99 | A xiv | Notes on, 1899..... | 104 | ix |
| Salt at, depth of..... | 26 | v | Mining and Development | | |
| log of bore-hole..... | 186 | R C | Co. | | |
| Enstatite. | | | Capital and date of charter..... | 8 | vii |
| Lake Huron and Lake of the | | | Eramosa tp., WELLINGTON CO. | | |
| Woods..... | 198 | ix | Limestone in, notes on..... | 120, 122 | B xiii |
| Enterprise lead mine, BLACK BAY, | | | river, WELLINGTON CO. | | |
| LAKE SUPERIOR. | | | Bridge on, stone for..... | 122 | B xiii |
| Galenain..... | 198 | ix | Marl in..... | 122 | A xiv |
| Keweenawan rocks in..... | 39 | iv | Niagara formation on..... | 120 | B xiii |
| Minor ref. to..... | 87 | A xiii | Erdman, R. E. | 112 | xii |
| Notes on, by Bell..... | 38 | R C | Erfurt, THURINGIA, GERMANY. | 356 | R C |
| Borron..... | 147 | R C | "Erian." | | |
| Mining Co. | | | Suggested name for Devonian .. | 46 | R C |
| Capital and date of charter..... | 8 | vii | <i>Eriua tetratic.</i> | | |
| Entricken, F. | | | Germany, on peat bogs..... | | |
| Brick-yard of, Stratford:— | | | Erickson, Rudolph | 236 | v |
| analysis of clay..... | 14 | B xv | <i>Erodophyllum.</i> | | |
| photos and notes..... | 42, 58, 93, 94 | B xv | Abitibi river..... | 187 | viii |
| <i>Eozoon emaculatum.</i> | | | Erie, ERIE CO., PENN. | | |
| A scientific myth..... | 12 | R C | Asbestos at, daily consumption .. | 90 | iii |
| Old views on..... | 221 | A xvi | clay | | |
| Organic nature of, denied..... | 186 | ii | <i>See also</i> Red-top clay. | | |
| <i>Epicauta cinerea.</i> <i>See</i> Beetle, ash- | | | Alvinston, analysis..... | 15, 75 | B xv |
| coloured blister | | | Beaverton, analysis..... | 15, 87 | B xv |
| Epidosite. | | | Calcium carbonate in..... | 15 | B xv |
| Definition of..... | 533 | R C | Composition and nature of..... | 11 | B xv |
| Epidote. | | | Description and distribution of .. | 51, 53 | R C |
| Apatite districts..... | 442 | R C | For brick and tile making, des- | | |
| Character and composition..... | 227 | vi | cription and occurrences..... | | |
| Occurrences of..... | 198 | ix | 11, 12, 58-60, 69-74, 77-80, | | |
| Mamainse..... | 194 | ii | 85-89, 95, 105, 111 | B xv | |
| <i>Epigaea repens</i> | | | For cement and pottery making .. | | |
| Mattagami valley..... | 151 | A xv | 115-119 | B xv | |
| 9 M. L. | | | Named by Bell..... | 1 | R C |

| | Page. | Vol. | | Page. | Vol. |
|---|-------------|--------|---|----------|--------|
| Erie clay. — <i>Con.</i> | | | Erythrite (COBALT BLOOM).— <i>Con.</i> | | |
| Notes on and photos..... | 10-18 | B xv | Lake Superior, Princes mine.... | 194 | ii |
| by Gibson..... | 126 | iii | | 59 | B xiv |
| Pieton, analysis..... | 15, 95 | B xv | Silver islet..... | 55 | B xiv |
| St. Joseph island, analysis..... | 15 | B xv | Madoc, near..... | 103 | A xiii |
| Stratford, analysis and photo.. | 91-93 | B xv | | 60 | B xiv |
| Thedford, analysis..... | 75 | B xv | | 11 | A xv |
| Washing of..... | 76 | B xv | Middlesburg dist., Transvaal.... | 70 | B xiv |
| Waterloo, analysis..... | 103 | B xv | Occurrences..... | 214 | vi |
| Cobalt Silver Mg. Co. | | | | 198 | ix |
| Capital and date of charter..... | 28 | A xvi | Pihuamo, Mex..... | 71 | B xiv |
| County Gas Co. | 135 | i | Port Arthur dist..... | 58 | B xiv |
| Mining Co. | | | Specific gravity of..... | 201 | vi |
| Capital and date of charter..... | 8 | vii | Whiskey lake..... | 11 | A xv |
| Natural Gas Co. | | | Erzgebirge mt., SAXONY AND BO- | | |
| Capital and date of charter..... | 29 | A xvi | HEMIA. | | |
| Oil Co. | | | Geology of, notes by Phillips.. | 62, 63 | B xiv |
| Capital and date of charter..... | 37 | A xiii | Graphitoid from..... | 165 | vi |
| <i>Erigeron acris.</i> | | | analysis..... | 166 | vi |
| Abitibi dist..... | 241 | A xiv | ES20 gold loc. See Duluth Min- | | |
| " <i>philadelphicum.</i> | | | ing Co. | | |
| Abitibi dist..... | 242 | A xiv | 79 zinc loc. See Gesic zinc mine. | | |
| Mattagami valley..... | 150 | A xv | 106 copper loc. See Black Bay | | |
| " <i>strigosus.</i> | | | Mg. Co. | | |
| Mattagami valley..... | 151 | A xv | 111 copper loc. See Tremblay, | | |
| Erickson, K. | | | Peter | | |
| Ref. to work by, on magnetic | | | 109 copper loc. See Grahame & | | |
| concentration..... | 341 | xii | Co. | | |
| Erin tp., WELLINGTON CO. | | | Escarments. | | |
| Gne'ph formation in..... | 121 | B xiii | Mode of formation of..... | 48 | R C |
| Niagara formation in..... | 120 | B xiii | <i>Eschara elegantula.</i> | | |
| <i>Eriomphalus decurt.</i> | | | Ottawa..... | 224 | x |
| Kwataboahegan river, notes by | | | Eschweiler, G. | 123 | v |
| Parks..... | 186 | A xiii | Escott tp., LEEDS CO. | | |
| <i>Eriphorum.</i> | | | Chalcopyrite in; cobalt in.... | 196 | ix |
| Germany, on peat bogs..... | 213 | ii | Eskers or Osars. | | |
| Ermatinger tp. | | | See also Kames. | | |
| Diabase dikes in..... | 76 | i | Meteor lake..... | 210 | x |
| Ermine. | | | Summit lake..... | 206 | A xv |
| Abitibi dist..... | 127 | A xiii | Trenton, photo..... | 224, 225 | x |
| | 242 | A xiv | Eskilstuna, NODERMANLAND PROV., | | |
| Ernestown tp., ADDINGTON CO. | | | SWEDEN..... | 199 | xii |
| Beach in..... | 241 | A xiii | Estof, MALMOHS PROV., SWEDEN. | 199 | xii |
| Plain in, altitude..... | 222 | x | Esnagami (or SHELL) lake, MAG- | | |
| Ernst, G. F. | | | PIE RIVE & L. SUPERIOR.... | 242, 250 | v |
| Manager, Gold Creek mine.... | 233 | ii | Espanola, MERRITT TP., ALG. | | |
| Minto claim..... | 141 | x | Clay at, notes and photos.... | 22-24 | B xv |
| Ernst farm, PEEL TP., WELLINGTON | | | Waterpower at..... | 69 | A xiv |
| CO. | | | Esperance chromium mine, NEW | | |
| Gas well in, log..... | 110 | A xv | CALEDONIA..... | 150 | C xiv |
| Erranballi, Paprapatti dist, Burma. | 233 | viii | Esperanza-Cobalt Mines Co. | | |
| Erratics. See Boulders. | | | Capital and date of charter..... | 29 | A xvi |
| Errington, Joseph | | | Esquesing tp., HALTON CO. | | |
| Manager, Massey iron mine.. | 56, 267 | xi | Brick clay in, boring for..... | 59 | xi |
| | 52, 55, 79 | A xiii | works in..... | 102 | i |
| | 41 | A xiv | See also Milton. | | |
| Eruptive contacts. | | | Lime kilns in. See Limehouse. | | |
| Probable cause of..... | 160 | vii | Niagara limestone at, analysis... | 58 | B xiii |
| Erythrite (COBALT BLOOM). | | | Esquimault and Nanaimo R'y. | | |
| Annaberg, Saxony..... | 62, 89 | B xiv | Iron imports for construction of... | 468 | R C |
| Cobalt dist..... | xi, 99, 100 | A xiii | Essen, RHEINISH-WESTPHALIA, GER- | | |
| | 12, 13, 18 | B xiv | MANY. | | |
| | 11 | A xv | Gun works at. See Krupp. | | |
| Bad Vermilion lake..... | 74 | iv | Essex COLCHESTER TP., ESSEX CO. | | |
| Description of..... | 214 | vi | Brick yards in, notes on..... | 63, 64 | A xv |
| Dymond tp., with diabase..... | 28 | B xiv | Limestone in, notes by Miller... | 41 | B xiii |
| Hardness of..... | 201 | vi | Petition by, re gas export to De- | | |
| Ingram tp..... | 29 | B xiv | troit..... | 41 | xi |
| Larder lake..... | 218 | A xvi | Water supply of..... | 56, 57 | i |

| | Page. | Vol. | | Page. | Vol. |
|--|---------|--------|---|----------|--------|
| Essex co. | | | Euphemia tp., LAMBERTON CO. | | |
| Gas in, production..... | 19 | vii | Oil in..... | 15 | viii |
| 1892..... | 10 | ii | boring for..... | 5 | v |
| report by Stiff..... | 42-44 | xi | notes by Blue..... | 21 | vi |
| Gypsum in..... | 115 | A xiv | records..... | 114 | A xiv |
| Limestone in, Clinton..... | 4 | i | production, 1900..... | 17 | x |
| Corniferous..... | 25 | B xiii | Euphrasia tp., GREY CO. | | |
| Gas in, in Clinton formation..... | 4 | i | Calcareous tufa in..... | 110 | B xiii |
| industry, 1895..... | 28, 29 | v | Clinton formation in..... | 48 | B xiii |
| 1899..... | 105 | ix | Marl in..... | 51 | B xiii |
| 1902..... | 38, 39 | xii | Niagara formation in..... | 49 | B xiii |
| notes and logs..... | 114-117 | A xiv | Euphrates river, ASIA MINOR..... | 166 | i |
| by Director..... | 115-120 | i | Euprychroite. | | |
| Blast furnace in. <i>See</i> Olinda. | | | Crown pt., N.Y..... | 441 | R C |
| Brick yards in, notes on..... | 63, 64 | A xv | Eureka Mining Co. | | |
| Gas in, compared with that in | | | Capital and date of charter..... | 8 | vii |
| Welland co..... | 106 | ix | Silver Mining Co. | | |
| export of..... | 28 | iv | Capital and date of charter..... | 29 | A xvi |
| causes exhaustion..... | 22 | A xiii | Europe. | | |
| 90 | 90 | A xiv | Armour plate in, paper by Blue..... | 141-141 | ii |
| Oil in, boring for..... | 18-24 | vi | Arsenic occurrences in..... | 101, 102 | xi |
| notes..... | 19, 20 | x | production..... | 110 | xi |
| production, capacity..... | 9 | iii | Copper production, 1880-87..... | 371 | R C |
| Salt works in, number of, 1897.. | 24 | vii | Mining laws and regulations of..... | 296-301 | R C |
| 1898.. | 17 | viii | Peat deposits of..... | 187-189 | i |
| co., MASS. | | | 32, 33 | A xiii | |
| Paisanite and solysbergites..... | 190 | ix | notes..... | 211 | ii |
| Standard Oil and Gas Co. | | | manufactured in, notes..... | 197-200 | xii |
| Wells shot by, for increased pressure..... | 106 | ix | Roads of, cement foundation..... | 16 | iv |
| Work by, 1895..... | 29 | v | Technical high-schools in..... | 494-502 | R C |
| Essonite. <i>See</i> Garnet. | | | <i>Eurymus philodice. <i>See</i> Clonded sulphur.</i> | | |
| <i>Estheria darsoni.</i> | | | Euthydemus, KING OF BACTRIA. | | |
| Greens creek, near Ottawa..... | 224 | x | Nickel employed by, for coinage..... | 164 | C xiv |
| Esthonia prov., RUSSIA. | | | Eva lake, EAST OF L. NIPIGON, | | |
| Peat in..... | 216 | ii | Tr. B. D. | | |
| Estremadura kingdom, SPAIN. | | | Rocks on and near..... | 119 | A xvi |
| Concretionary form of phosphates in..... | 441 | R C | Evans, A. | 103 | vii |
| "Ethel" ss. | 69 | viii | B. H. | 122 | vii |
| Ethylene. | 33 | v | H. W. | | |
| Etna Iron and Pipe Mills. | | | Work by, 1901..... | 279 | A xiv |
| Labour employed by, statistics.. | 370 | R C | 1905..... | 285 | A xiv |
| Etobicoke river | | | John D. | | |
| Hudson River formation on..... | 126 | B xiii | Assays by, of auriferous gravels, | | |
| tp., YORK CO. | | | Vermilion river..... | 152 | x |
| Gas in..... | 138 | i | Assistant to Dr. Peters..... | 139 | C xiv |
| Utica formation in. <i>See</i> Mimico. | | | Manager, Canadian Copper Co.'s | | |
| Etomami river, ALBANY RIVER. | | | smelter..... | 140 | C xiv |
| Iron ore near mouth of..... | 23 | R C | Stobie mine..... | 245 | ii |
| Eton tp., R. R. D. | | | Photo of..... | 138 | C xiv |
| Agricultural land in..... | 182 | vii | Sudbury locations applied for by..... | 170 | C xiv |
| <i>Eudorcas in ditubulatus.</i> | | | J. W. | | |
| Manitoulin islands..... | 84 | B xiii | <i>See also</i> Evans No. 2 mine. | | |
| Eulytite (SILICATE OF BISMUTH). | | | Map by, of Sudbury deposits, | | |
| Saxony..... | 89 | B xiv | ref. to..... | 192 | ix |
| <i>Euomphalus.</i> | | | R. B. | 141 | x |
| Kwataboahagan river..... | 186 | A xiii | 74 | xi | |
| photo, in limestone..... | 192 | A xiii | S. T. | | |
| <i>" de cavi.</i> | | | Part owner, Nickel Cliff mine... 286 | xi | |
| Cayuga N. tp..... | 146 | xii | W. A. | | |
| Hagersville..... | 145 | xii | Brick-yard of, near Sudbury : | | |
| <i>" rotundus.</i> | | | clay for, analysis..... | 26, 27 | B xv |
| Port Colborne (near)..... | 36 | xi | Saugeen..... | 20 | B xv |
| <i>Eupatorium ageratoides.</i> | | | notes on..... | 56, 57 | E xv |
| Abitibi Lake dist..... | 241 | A xiv | | | |
| <i>" purpureum.</i> | | | | | |
| Mattagami valley..... | 151 | A xv | | | |

| | Page. | Vol. | | Page. | Vol. |
|----------------------------------|----------|--------|---------------------------------------|----------|--------|
| Evans, Walter..... | 42 | vi | Everton, ERIN TP., WELLINGTON CO. | | |
| William C. | | | Guelph formation at..... | 121 | B xiii |
| Director, Marmora Foundry Co., | 21 | ii | Evje, CHRISTIANSSAND STIFT, NOR- | | |
| creek, MAGPIE RIVER, L. SUPE- | | | WAY. | | |
| RIOK. | | | Nickel matte of, analysis..... | 154 | c xiv |
| Drainage area of..... | 286 | A xiv | mines..... | 178, 179 | iv |
| Minor ref. to..... | 293 | A xiv | ore, analysis..... | 283 | xii |
| Rocks on and near..... | 314, 344 | A xiv | Ewing, W..... | 141 | x |
| Iron formation..... | 327 | A xiv | Excelsior gypsum mine, NEAR | | |
| nickel mine, SNIDER TP., SUB- | | | CAYUGA, HALDIMAND CO. | | |
| BURY DIST. | | | Idle, 1892..... | 253 | ii |
| Accident in..... | 67 | vi | 1895..... | 283 | v |
| Actinolite in..... | 292 | xii | Notes on, 1891..... | 241 | i |
| Copper in, percentage of..... | 378 | rc | 1893..... | 197, 198 | iii |
| Discovery of..... | 131, 169 | c xiv | 1894..... | 251 | iv |
| Geology of..... | 262, 263 | xii | 1896..... | 279, 280 | vi |
| Hills of, gossan-covered..... | 101 | c xiv | 1897..... | 99, 100 | vii |
| Idle, 1891..... | 230 | i | Exeter, STEPHEN TP., HURON CO. | | |
| 1897..... | 97 | vii | Onondaga formation at..... | 45 | B C |
| 1900..... | 122 | x | Salt Co. | | |
| Inspector's report on, 1892..... | 244 | ii | Operating, 1902..... | 38 | xii |
| 1893..... | 184 | iii | 1905..... | 21 | A xv |
| 1894..... | 244, 245 | iv | 1906..... | 23 | A xvi |
| 1896..... | 275, 276 | vi | Exhibitions. | | |
| 1898..... | 34 | viii | Buffalo. See Pan-American. | | |
| 1899..... | 96 | ix | Chicago. See World's Fair. | | |
| Levels of, plan..... | 262 | xii | London, 1851, iron ore at..... | 32-34 | ii |
| Matte of, analysis..... | 152 | c xiv | lessons of..... | 412 | rc |
| Minor refs. to..... | 433 | rc | 1862, iron ore at..... | 42, 43 | ii |
| 284, 285 | | xii | Paris, France, peat pamphlet | | |
| Nickel oxide in, analysis..... | 180 | ii | prepared for..... | 197 | ii |
| proportion..... | 378 | rc | Philadelphia, 1876, nickel at..... | 381 | rc |
| Notes on, by Bell..... | 24 | rc | 135 | ii | |
| Merritt..... | 90 | rc | Experimental farm, OTTAWA. | | |
| Peters, jr..... | 103, 104 | rc | Tests at, on insecticides..... | 115, 116 | xi |
| Opened up, 1885..... | 137 | c xiv | Exploration Company of Canada. | | |
| Ore deposits of, character..... | 278, 279 | xii | Capital and date of charter..... | 29 | A xvi |
| Pentlandite in..... | 281 | xii | Exter - ? | | |
| 16, 159 | | c xiv | Peat drying process of..... | 193 | i |
| Photo of..... | 256, 257 | xii | Eye-gate or Eye-stone. See Agate. | | |
| Plan of..... | 49 | c xiv | Eye lake, SEINE RIVER DIST., R. R. D. | | |
| Production of..... | 156 | c xiv | Gold mining near, 1897..... | 67 | vii |
| Railway to..... | 136 | c xiv | 1898..... | 91 | viii |
| Reeks in, dialase..... | 85 | c xiv | 1899..... | 81 | ix |
| gabbro, petrography..... | 296 | xii | Saw mill on..... | 105 | x |
| norite..... | 121 | c xiv | Eye (or DEER) river, SEINE RIVER, | | |
| notes by Coleman..... | 48-50 | c xiv | R. R. D. | | |
| sapstone..... | 81 | i | Description of Seine river above | | |
| Section of..... | 49 | c xiv | and below..... | 149 | v |
| Sulphides of..... | 153 | c xiv | Glacial striae on..... | 89 | v |
| No. 2 mine, SNIDER TP., ALG. | | | Minor ref. to..... | 69 | v |
| Notes on, 1904..... | 72 | A xiv | Faber, A. W. & Sons. | | |
| Evansville, VANDEBURG CO., IND. | | | Pencil factory of..... | 37 | vi |
| Analysis of clay from..... | 160 | A xiii | Johann | | |
| Evanturel tp., Nip. | | | Pencil factory of..... | 37 | vi |
| Rocks in..... | 214 | xi | Fagan, George..... | 50 | xi |
| Evelyn tp., ALG. | | | Fagus ferruginea. See Beech. | | |
| Glacial drift in..... | 187 | A xiv | Fahl ores. See Tetrahedrite. | | |
| Eyenden, H. W..... | 116 | ix | Fahlbands. | | |
| Evera, J. R. Van | | | Definition of..... | 150 | A xvi |
| Gold mining by, Michipicoten | | | Black Hills, S. Dak., gold in..... | 71 | iv |
| div..... | 113 | ix | Middleton, near..... | 82 | vii |
| Everett, H. L..... | 103 | viii | Minnitaki lake..... | 57 | v |
| 116 | | ix | Norway, cobaltiferous..... | 67 | B xiv |
| J. E..... | 24 | viii | | | |
| W..... | 74 | xi | | | |
| 66 | | xii | | | |
| mine, PRINCE TP., ALG. | | | | | |
| Assays of ore from..... | 60 | rc | | | |

| | Page | Vol. | | Page | Vol. |
|---|-----------------|----------|--|----------|-----------|
| Fahlbands. — <i>Con.</i> | | | Fall creek , near DOG RIVER, L. SUPERIOR. | | |
| Rainy River dist. :— | | | Minor ref. to..... | 282, | 285 A xiv |
| Lake of the Woods..... | 110 | vii | Rocks near..... | 316 | A xiv |
| notes by Coleman..... | 118 | vi | cherts..... | 317 | A xiv |
| Rainy Lake region..... | 52 | iv | iron formation..... | 337 | A xiv |
| Fair—? | 135 | xi | Falls of Foyers , SCOTLAND. | | |
| Fairbairn , William (1835)..... | 165 | C xii | Calcium carbide made at..... | 34 | v |
| William (1902)..... | 55, 56 | xv | ..... | 31 | vi |
| Fairbank , J. H. | | | Falun , KOPPARBURG PROV., SWEDEN. | | |
| Evidence by, <i>re</i> oil wells..... | 158, 159 | R C | Iron smelting near..... | 484 | R C |
| Purchase by, of oil wells, Dawn tp..... | 19 | vii | Fanchot , S. P..... | 261 | v |
| Consolidated Mining Co. | | | Fanning , G. H..... | 71 | viii |
| Capital and date of charter..... | 8 | vii | T..... | 64 | ix |
| Work by, Fairbank tp..... | 225 | i | pyrites claim, VERMILION LAKE, NIP. | 29 | xii |
| (Washaigamog) lake, FAIRBANK TP., SUDBURY DIST. | | | Notes on, by Fraleck..... | 177 | A xvi |
| Granite on..... | 84 | i | Faraday , Michael | | |
| Nickel on..... | 194 | A xiii | Experiments by, on nickel alloy, tp., HASTINGS CO. | 165 | C xiv |
| Rocks of, nickel bearing eruptive, analysis..... | 23, 24 C xiv | | Apatite in..... | 194 | ix |
| ..... | 212, 213 A xiii | | Corundum area of..... | 216 | viii |
| ..... | 115-117 C xiv | | Iron ore in..... | 133 | R C |
| ..... | 209 A xiii | | railway to develop..... | 61 | ii |
| Shores of, character..... | 6 | C xiv | Mispickel in..... | 198 | xi |
| Terrace N. of, altitude..... | 103 | C xiv | <i>See also</i> Jeffry mine. | | |
| Fairbank tp. , SUDBURY DIST. | | | Syenite in..... | 226-229 | vii |
| Coal-like specimens from..... | 6 | Bull. ii | ..... | 215 | viii |
| Galena in..... | 105 | R C | Farbaky , S. | | |
| Gold in..... | 92 | i | Ref. to papers by, on magnetic separation..... | 340, 341 | xii |
| mining, 1891..... | 225 | i | Fargey and Rollins . | | |
| 1897..... | 141 | vii | Brick-yard of, Tweed..... | 70 | B xv |
| prospecting..... | 47 | iii | Farm land. <i>See</i> Agricultural land. | | |
| Maple in..... | 105 | C xiv | Farmers Loan and Trust Co. | 146 | iii |
| Nickel in..... | 194 | A xiii | Farnum , H. C. | | |
| Road in, built by Govt..... | 9 | vi | Coe iron mine leased to..... | 262 | xi |
| Rocks in..... | 242 | xii | Iron bounties paid to, 1901..... | 26 | xi |
| nickel eruptive..... | 23, 24 | C xiv | 1902..... | 25 | xii |
| Fairbanks , D. C. O. <i>See</i> next refs. | | | Manager for Mineral Range Iron Mg. Co..... | 260 | xi |
| and Carman. |  |  | ..... | 77 | A xiv |
| Wells of, logs..... | 110-115 | A xiv | ..... | 95, 97 | A xv |
| Work by, in Bothwell field..... | 109 | A xiv | ..... | 16, 82 | A xvi |
| Rogers, H. | | | Farquahar lake , HARCOURT TP., HALIBURTON CO. | | |
| Works of, Enniskillen tp., notes by Blue..... | 27 | v | Copper prospecting on..... | 47 | xi |
| Fairchild , Prof. Herman L. | | | Farquharson, McLaughlin and Hartney . | | |
| Ref. to work by, on Iroquois Beach..... | 233-235 | A xiii | Marble quarrying by, Arnprior.. | 82 | R C |
| Views of, on Iroquois beach..... | 226 | A xiii | Farr , C. C. | | |
| Fairview claim , NET LAKE, TIMAGAMI REG., NIP. | | | Acknowledgments to..... | 40 | A xiv |
| Notes on, by Coleman..... | 172 | ix | Limestone quarry of, Halleybury, analysis..... | 87 | B xiii |
| Fairy lake , near ECHO LAKE, ALG. |  |  | ..... | 32 | B xiv |
| Antimony on..... | 30 | R C | Statement by, <i>re</i> climate of Timiskaming dist..... | 107 | iv |
| Falcon island , L. OF THE WOODS, R. D. | | | H. H..... | 149 | A xiv |
| Rocks on..... | 117 | vii | creek, PETERSON LAKE, COLEMAN TP., NIP. | | |
| Falconbridge tp. , NIP. | | | Peterson lake drained into..... | 81 | A xv |
| Boring in, for iron..... | 51, 53 | xii | Farrell pyrites claim , MADOC TP., HASTINGS CO. | | |
| Drift in, photo..... | 102 | C xiv | Notes on, by Fraleck..... | 161, 163 | A xvi |
| Gabbro in..... | 75 | C xiv | Originally worked for gold..... | 185 | A xvi |
| Nickel range in..... | 273, 276 | xii | Farren lake , S. SHERBROOKE TP., LANARK CO. | | |
| ..... | 61, 115 | C xiv | Iron ore beneath..... | 50 | ii |
| Swamps in..... | 7 | C xiv | | | |
| Terraces in..... | 106 | C xiv | | | |
| Falconer , E..... | 129 | vii | | | |
| P..... | 103 | vii | | | |
| Falding , F. J..... | 199 | A xvi | | | |

| | Page. | Vol. | | Page. | Vol. |
|--|------------|------|---------------------------------------|------------|------|
| Farry, D. | 128 | xii | <i>Favosites turbinatum</i> . | | |
| Farwell, William | 97 | vi | Abitibi river..... | 187 | viii |
| creek, PUKASKWA RIVER, L. | | | Anderdon tp..... | 125 | xi |
| SUPERIOR. | | | Cayuga, N. tp..... | 146 | xii |
| Rocks on..... | 343 A | xiv | Hagersville..... | 145 | xii |
| Fasciono, Michel (MIKE FISHER) .. | 30 A | xv | Kwataboahagan river..... | 181 A | xiii |
| Fauna. See the different species. | | | Port Colborne, near | 35 | xi |
| <i>Favosites</i> . | | | Rockford, Villanova, Woodstock; | | |
| Kawanaska river (near) | 186 | xii | Walpole tp..... | 143, 148 | xii |
| Lac Seul..... | 92 | v | <i>winchelli</i> . | | |
| Thedford..... | 8, 75 B | xv | Kwataboahagan river..... | 181 A | xiii |
| <i>basalticus</i> . | | | Faulke, William | 100 | ix |
| Anderdon tp..... | 125 | xi | Faulkner, Thomas | 255 | ii |
| Cayuga, N. tp..... | 146 | xii | Faults | | |
| Hagersville..... | 145 | xii | Cedar narrows, Pickerel lake.... | 62 | iv |
| Kwataboahagan river..... | 18 A | xiii | L. Superior, Keweenawan rocks. | | |
| Port Colborne (near) | 35 | xi | 76, 77 | iii | |
| Rockford | 145 | xii | Michipicoten div., Helen forma- | | |
| Villanova | 143 | xii | tion | 311 A | xiv |
| <i>hillingsii</i> . | | | Ste. Anne de Prescott | 99 B | xiii |
| Thedford (near) | 154 | xii | Fauna. See Mammals. | | |
| <i>cumonsi</i> . | | | Fawcett, William | | |
| L. Superior, north shore | 156 | viii | Gold mining by. Seine River reg. | 157 | v |
| Port Colborne (near)..... | 35 | xi | 74 | vii | |
| <i>epidermatum</i> . | | | Secretary, A D 2 Gold Mg. Co... | 129 | vii |
| Port Colborne (near)..... | 35 | xi | Fawn river, SEVERN RIVER. KEE. | | |
| <i>farosus</i> . | | | Limestone on | 93 | v |
| Villanova..... | 143 | xii | Fay, J. | 141 | x |
| <i>gibsoni</i> . | | | 74 | xi | |
| Kwataboahagan river..... | 181 A | xiii | Feather ore. See Jamesonite. | | |
| photo of section of.... | 192, 193 A | xiii | Febrifuge. | | |
| <i>gothlandicus</i> . | | | Antifebrine, composition of..... | 33 | v |
| Ancaster | 141 | xii | Corundum | 230 | viii |
| 125 B | xiii | | Fee, G. | 116 | ix |
| Gore Bay..... | 77 B | xiii | Feigle gold mine, MARMORA TP., | | |
| Villanova..... | 143 | xii | HASTINGS CO. | | |
| <i>heldbergia</i> . | | | Afterwards known as Sovereign | | |
| Cayuga, N. tp..... | 146 | vii | mine | 93 A | xiii |
| Villanova | 143 | xii | Evidence <i>re</i> before R. C..... | 110 | R C |
| <i>hemisphericus</i> . | | | Position of..... | 28 | R C |
| Abitibi river..... | 187 | xiii | <i>See also</i> Sovereign gold mine | | |
| Anderdon tp..... | 125 | xi | Feilitzen, H. Von | | |
| Cayuga, N. tp..... | 146 | xii | Experiments by, on moss-litter.. | 140 | iii |
| Hagersville..... | 145 | xii | Feldspar. | | |
| Kwataboahagan river..... | 181 A | xiii | Alumina a constituent of | 173 | i |
| Paris, Ont., near..... | 91 B | xiii | Association of, with apatite... | 438-441 | R C |
| Port Colborne, near | 35 | xi | Birds Creek (near)..... | 288 | viii |
| Rockford | 148 | xii | Black hills, S. Dak., with colum- | | |
| St. Marys, near | 152 | xii | bite | 237 | vii |
| 96 B | xiii | | Bowman tp., Que..... | 440 | R C |
| Villanova and Woodstock..... | 143 | xii | Building-stones containing..... | 133 | iii |
| <i>hemisphericus</i> var. <i>epidermatum</i> . | | | Determination of..... | 205 | vi |
| Cayuga, N. tp..... | 146 | xii | Frontenac co. | | |
| <i>limetaris</i> . | | | Bedford tp. mining and analysis. | 26 | x |
| Cayuga, N. tp..... | 146 | xii | mining | 39 | xi |
| Hagersville..... | 145 | xii | 37, 137 | xii | |
| Villanova..... | 143 | xii | 19 A | xv | |
| <i>nitellus</i> or <i>placatus</i> . | | | photo of open cut..... | 224, 225 A | xiii |
| Anderdon tp..... | 125 | xi | Border mine | 86 A | xvi |
| Thedford, near..... | 154 | xii | mining, 1903 | 90 A | xiii |
| <i>polymorphus</i> . | | | 1904 | 81 A | xiv |
| Abitibi river..... | 187 | viii | 1905..... | 40, 102 A | xv |
| Cayuga, N. tp..... | 146 | xii | Richardson mine, notes and | | |
| Paris, Ont..... | 91 B | xiii | photo | 85 A | |
| Rockford | 143 | xii | Hardness of..... | 448, 535 | R C |
| Woodstock | 148 | xii | Kingston dist., for pottery .. | 205 | ix |
| <i>tuberosus</i> . | | | Lynedoch tp., containing beryl.. | 235 | vii |
| Port Colborne (near)..... | 35 | xi | | | |

| | Page. | Vol. | | Page. | Vol. |
|---|----------------|------|---|--------------------|------|
| Feldspar. — <i>Con.</i> | | | Ferguson, M. | 48 A | xiii |
| Mining of, notes on, 1902 | 136-138 | xii | R. G. | 103 | vii |
| 1903 | 21, 90 A | xiii | William Douglas <i>See</i> Fer- | | |
| 1904 | 81-83 A | xiv | guson gold mine. | | |
| 1905 | 99-102 A | xv | bay, L. TIMAGAMI, NIP. | | |
| Nepheline-syenite mistaken for | 211 | vii | Rocks on | 172, 171 | x |
| Notes on varieties..... | 224, 225 | vi | gold mine, SHOAL LAKE, SEINE | | |
| 533 | | R C | RIVER. | | |
| Port Coldwell, analysis..... | 147 | vii | Examined by Angove | 72 | ix |
| Specific gravity of..... | 233 | viii | Granite of | 116 | vi |
| Statistics of, 1900 | 11, 12 | x | 262 | | viii |
| 1901 | 13 | xi | Idle, 1897..... | 75 | vii |
| 1902 | 12, 13, 37 | xii | 1898..... | 273, 277, 281 | viii |
| 1903..... | 3, 4, 21 A | xiii | Notes on, 1896..... | 5 Bull. i | |
| 1904..... | 1, 3, 19, 81 A | xiv | 56, 80, 259 | | vi |
| 1905..... | 1, 20 A | xv | Office of, photo | 95, 96 | vi |
| 1906..... | 3, 6, 21 A | xvi | iron mine, near ROBERTS- | | |
| United States, import duty on... .. | 295 | xi | VILLE, FRONTENAC CO. | | |
| production | 525 | R C | Notes on, 1899..... | 104 | ix |
| aventurine | | | pt., TIMAGAMI LAKE, NIP. | | |
| Occurrences of..... | 195 | ix | Iron pyrites near..... | 169 | x |
| porphyry. | | | quarry, ROSS TP., RENFREW CO. | | |
| Michipicoten river, photo... .. | 160, 161 | xi | Character of stone in..... | 103 B | xiii |
| Fell, R. N. | 171 | vii | tp., P.S.D. | | |
| Felsite. | | | Copper claims in..... | 116 | xii |
| Madoc, petrographical notes | 207 | xi | Mica mining in..... | 279 | v |
| schist. | | | Ferland, Arthur | | |
| Wabigoon Lake dist. | 183 | vii | Part owner, Chambers-Ferland | | |
| Felspar. <i>See</i> Feldspar. | | | mine | 5 A | xiv |
| Fenelon Falls, FENELON TP., VICTO- | | | Silver mining by, Cobalt..... | 40 A | xiv |
| RIA CO. | | | S. | | |
| Charcoal plant at | 3 B | xiii | Lucky escape of | 40 A | xiv |
| falls, CAMERON LAKE, VIC- | | | Fermont, QUE. See Radnor Forges. | | |
| TORIA CO. | | | Fern. | | |
| Trenton fossils from | 113 B | xiii | Mattagami valley | 151 | R C |
| tp., VICTORIA CO. | | | Moose River basin | 177 A | xiii |
| Brick-yard in. <i>See</i> Rosedale. | | | bracken. | | |
| Fenestella. | | | Abitibi dist..... | 218 A | xiv |
| Hamilton | 141 | xii | Ferric oxide. | | |
| Paris, Ont. (near) | 92 B | xiii | Composition of..... | 54 B | xv |
| Port Colborne (near)..... | 36 | xi | Cure for arsenical poisoning by | | |
| Stony pt., L. Huron..... | 155 | xii | fumes | 121 | xi |
| Woodstock..... | 148 | xii | Ferrie tp., PARRY SOUND DIST. | | |
| Fenian raid, The (1866). | | | Limestone in | 93, 94 B | xiii |
| Effect of, on Bothwell oil field.. | 23, 24 | vi | Pyrrhotite in..... | 170 | ix |
| Fennell, William | 276 | vi | Ferrier, Hon. James | | |
| Fenton, F. A. | | | Of Montreal Mining Co | 178 | ii |
| Licence to..... | 103 | vii | President, Bruce mines | 94 | R C |
| Manager, Ophir g.m..... | 90 | ix | W. F. | | |
| Magnetic iron sand shown by, at | | | Corundum discovered by, Carlow | | |
| World's Fair... .. | 79 | ii | tp.... | 207, 208, 213, 224 | vii |
| Notes by, on gas at Little Current. | 140 | i | 207, 244, 250 | | viii |
| Thomas F. | 515-521 | R C | notes on same | 61-66 | vi |
| Fenwick tp., ALG. | | | Minor refs. to..... | 161, 185 | ix |
| Gold mining in | 59 A | xiv | island, L. OF THE WOODS, R.R.D. | 181 | v |
| <i>See also</i> Lucinda gold mine. | | | Ferris tp., NIP. | | |
| Fera, James | 49 | xi | Apatite crystals in. <i>See</i> Astor- | | |
| Ferari, Basil | 39, 41 A | xiii | ville. | | |
| Ferdinandoberg, HUNGARY. | | | Ferro-nickel. | | |
| Gasifying of wood at, for iron- | | | Manufacture of, at Sault Ste. | | |
| smelting..... | 484 | R C | Marie | 62 | x |
| Fergus, NICHOL TP., WELLINGTON CO. | | | 66 | | xi |
| Guelph formation at..... | 45 | R C | photo of works... .. | 90, 97 | xi |
| 121 B | | xiii | Ferrous oxide. | | |
| Limekilns at..... | 14 A | xiii | Composition of..... | 54 B | xv |
| 122 B | | xiii | Ferrum lake, TIMAGAMI DIST., NIP. | | |
| Ferguson, F. W. | 81 | ii | Jaspilite on : rocks on | 172 | x |
| H. A. | 104 | ix | Ferry point, MISSINAIBI LAKE, ALG. | 140 | ix |
| John | 53, 57 | xi | | | |

| | Page. | Vol. | | Page. | Vol. |
|---|-----------|------|--|----------|------|
| Fertilizers. | | | Findlay, Hancock Co., Ohio. | | |
| See also Apatite, Gypsum, Marl, | | | Cincinnati arch. beneath..... | 116 | i |
| Moss-litter, Phosphate, etc. | | | Oil and gas in..... | 116, 117 | i |
| Canada, production, 1886, 1887.... | 243 | R C | depth and pressure..... | 155 | i |
| Distribution of, notes by Blue, | | | paper by Director, 1890..... | 120-123 | i |
| 177, 178 | | i | Tre ton in, depth below tide.... | 113 A | xv |
| Lime used in manufacture of.... | 3 B | xiii | Gas Light and Coke Co. | 121 | i |
| Peat for..... | 211 | i | Mining Co. | | |
| moss-litter, its value..... | 187 | vi | Capital and date of charter..... | 29 A | xvi |
| notes by McFar- | | | Rolling Mills Co. | 122 | i |
| lane..... | 190 | vi | Finlay, John | | |
| Slag from Thomas-Gilchrist steel | | | Oil on farm of, Pelee island..... | 25 | v |
| process for..... | 91 | ii | 18 | | vi |
| Sulphuric acid for..... | 197 A | xvi | Finmark, N. of CONNIE TP., TH. B. | | |
| notes by Fraeek..... | 193 A | xvi | DIST. | | |
| Act. | | | Glacial striae near, direction.... | 89 | v |
| Effect of, on superphosphate in- | | | Gold mining near..... | 86 | vi |
| dustry..... | 33, 34 | vi | Iron ore near..... | 47 | v |
| Philbrook, T. F. | 44 | ix | Huronian near..... | 84 | v |
| <i>Fiber zibethicus.</i> See Muskrat. | | | Railway from, to Matawin range | | |
| Fibroferrite. | | | suggested..... | 84 | v |
| Rainy River dist..... | 198 | ix | Finn vein, FERGUSON GOLD MINE, | | |
| Fibrolite. | | | SHOAL LAKE, SEINE RIVER REG. | 5 Bull. | i |
| Dryden tp..... | 198 | ix | 80 | | vi |
| Specific gravity of..... | 233 | viii | Fir balsam. | | |
| Fidelity Gas and Oil Co. | | | Kenogami valley and Nipigon | | |
| Capital and date of charter..... | 25 A | xv | Lake dist..... | 112 | iv |
| Fides, James. | 164 | R C | Fire (s). | | |
| Fields Crossing, GREY CO. | | | See also Forest fires. | | |
| Terraces near..... | 177 | ix | Boston, U.S., effect on granite | | |
| Fife, A. T. | 72 | xii | buildings..... | 134 | iii |
| Fifteen-mile creek, WELLAND CO. | | | Brunner peat works..... | 32 A | xiii |
| Beach gravels on..... | 228 A | xiii | Crown Point gold mine..... | 79 | x |
| Fifth Meridian, R.R.D. | | | Copper Cliff nickel mine..... | 273 | vi |
| Geology of..... | 169-171 | vii | Deloro gold mill..... | vi | vii |
| economic..... | 179 | vii | 21 | | viii |
| Fighting Chance gold mine, SEINE | | | Deseronto, Rathbun Co's. plant. | 120 B | xv |
| RIVER DIST., R.R.D. | | | Effect of, on granite buildings. | 134, 136 | iii |
| Felsite schists in..... | 263 | viii | El Diver gold mine..... | 30 | iii |
| Gold Mg. Co. | | | Fowler mansions, Gouverneur, | | |
| Capital and date of charter..... | 9 | ix | N. Y..... | 80 | R C |
| Filer, E. G. | 256 | xi | 63 B | | xiii |
| 85 | | xii | Grace gold mine..... | 72 | xi |
| Files. | | | Haileybury saw-mill..... | 51 A | xvi |
| Canadian imports of, 1881-87. | | | Kenora..... | 170 | v |
| 250, 468 | | R C | Little Master gold mine..... | 43, 58 A | xvi |
| <i>Filices.</i> See Ferns. | | | Marlbank cement works..... | 16 | x |
| Filion, F. E. | 105 A | xv | Ontario Corundum Co., plant... | 75 A | xiv |
| 91 A | | xvi | Ontario Smelting works..... | 6 A | xiii |
| S. O. | 291 | xi | 69 A | | xiv |
| 86 A | | xiv | 141 C | | xv |
| Fimby, John | 25 | v | Oxford Refining works..... | 64, 65 A | xv |
| Finmacken, NORWAY. | | | Owen Sound Cement Co's. works. | 17 | iv |
| Schists of..... | 303 A | xiv | Petrolea..... | 165 | R C |
| Financial Development Co. | | | Pithy pt., Rainy lake, H.B.C. | | |
| Operating Martha Mica mine.... | 23 A | xvi | post..... | 163 | v |
| Finch, purple | | | Regina g. m..... | 184 | v |
| Abitibi dist..... | 126 A | xiii | Sultana g. m..... | 5, 235 | v |
| Finch, FINCH TP., STORMONT CO. | | | Stella pyrites mine, N.Y..... | 191 A | xvi |
| Marine deposits at..... | 217 | x | Toronto and Hamilton Sewer | | |
| Trenton near..... | 48, 111 B | xiii | Pipe Co's plant..... | 19 A | xvi |
| tp., STORMONT CO. | | | West End Silver Mt. mine..... | 5 A | xiii |
| Limestone in, fossiliferous..... | 40 B | xiii | Firearms. | | |
| Trenton..... | 48, 111 B | xiii | Canadian imports of, 1881-87.... | 250 | R C |
| Peat bog in..... | 190 | i | Fire-box. | | |
| 198 | | ii | For peat fuel, sketch of..... | 208, 209 | xii |

| | Page. | Vol. | | Page. | Vol. |
|---|----------|-----------|--|---------------|--------|
| Fire-clay. | | | Fisk, F. C. | 83, 273 | viii |
| Abitibi river..... | 159 | A xiii | | 242 | x |
| analysis..... | 160 | A xiii | Fissure veins. | | |
| Hudson River formation..... | 118 | iii | Definition of..... | 253 | x |
| Toronto (near), analysis..... | 54 | R C | <i>Fistulipora canadensis.</i> | | |
| =damp. | | | Rockford; Walpole tp..... | 143 | xii |
| English coal-mines, accidents due to..... | 199 | iv | Fitch, Miss Alice F. D. | | |
| =proof paint. | | | Photos by..... | 128, 129 | v |
| Made at Limehouse..... | 79 | R C | Fitzgerald, John | | |
| =sand river, MICHIPICOTEN DIV., ALG. | | | Corundum mining by, Raglan tp..... | 243 | viii |
| Description of..... | 191, 192 | vii | T. | 103 | vii |
| Gold mining on..... | 80 | xii | Fitzpatrick, Alfred | 45 | A xv |
| Rocks on..... | 146 | viii | H. | 48 | A xiii |
| =steel river, SEINE RIVER, R. R. D. | | | R. Y. | 49, 52 | A xvi |
| First Quill lake, NEAR PIPESTONE LAKE, R. R. D. | | | bay, LARDER LAKE, NIP. | | |
| Keewatin rocks on..... | 61 | iv | Photo of..... | 211 | A xvi |
| Fischer, Otto | | | lake north of..... | 204 | A xvi |
| Calorific power of wood determined by..... | 166 | vi | Quartz vein on, photo..... | 214 | A xvi |
| Fish. | | | Rocks on..... | 207, 210, 213 | A xvi |
| <i>See also</i> the different species. | | | Fitzroy Harbour, FITZROY TWP., CARLETON CO. | | |
| Abitibi dist..... | 127 | A xiii | Cambro-Silurian at..... | 38 | B xiii |
| | 242, 253 | A xiv | tp., CARLETON CO. | | |
| Hudson and James bays..... | 133 | iv | <i>See also</i> Fitzroy Harbour. | | |
| Lake of the Woods..... | 97, 98 | vi | Galena in..... | 198 | ix |
| exhaustion of supply..... | 167 | v | Mineral water at, analysis..... | 204 | ix |
| Lake Superior. <i>See</i> Fishing industry. | | | Fitzwilliam, Earl | 22 | i |
| Larder Lake dist..... | 221 | xi | island, L. HURON. | | |
| Mattagami River reg..... | 117, 131 | A xv | Building stone on..... | 93 | i |
| Kamiskotia lake..... | 119 | A xv | limestone..... | 76 | B xiii |
| Michipicoten div..... | 206 | vii | Five Acre gold mine, MARMORA TWP., HASTINGS CO. | | |
| | 297 | A xiv | Notes on, 1902..... | 110 | xii |
| | 200 | A xv | <i>See also</i> Atlas Arsenic Co. | | |
| Nipigon Lake region..... | 110, 139 | A xvi | Flagstones. <i>See</i> Paving stones. | | |
| Rainy Lake dist..... | 44, 97 | iv | Flaherty, R. H. | | |
| Timagami Lake region..... | 58 | R C | Acknowledgments to..... | 105 | A xvi |
| | 161 | x | Boring by, for iron, Nipigon L. dist..... | 265 | xi |
| Island, L. OF THE WOODS, R. R. D. | | | | 127 | A xvi |
| Gold mining on..... | 233 | ii | Sturgeon river..... | 311 | xii |
| Fisher—? | | | Iron mining and prospecting by: | | |
| Assay by, of iron ore from Belmont tp..... | 60 | ii | Atikokan dist..... | 266 | xi |
| Mike <i>See</i> Fascione, Michel | | | | 43 | A xiii |
| Thomas W. | | | Loon lake..... | 254 | A xiv |
| Foreman, Belmont gold mine..... | 47, 48 | x | Port Arthur dist..... | 156 | A xv |
| | 53, 236 | xi | analysis of ore..... | 168 | A xv |
| | 112 | xii | Manager, Burley g. m..... | 46, 52 | viii |
| W. G. | 43, 45 | A xiii | (resigned)..... | 42 | ix |
| and McQuesten. | 326 | R C | Foley g. m..... | 260 | vi |
| or Black cat. | | | | 68 | vii |
| Abitibi dist..... | 178, 193 | viii | Golden Star g. m..... | 265-267 | viii |
| | 189 | xii | | 66, 68 | ix |
| | 127 | A xiii | Yum Yum g. m..... | 79, 80 | x |
| Hinterland, The..... | 133 | iv | Steamer built by, on Nipigon lake..... | 106 | A xvi |
| lake, MICHIPICOTEN DIV., ALG. | | | Flaherty, Dr. R. H. | 56 | xi |
| Rocks near..... | 205 | A xv | Flanagan, J. | 103 | vii |
| Fisher's mills, HUMBER RIVER. | | | | 116 | ix |
| Hudson River limestone at..... | 126 | B xiii | | 141 | x |
| Fishhook lake, MICHIPICOTEN DIV., ALG. | | | Flamborough tps., WENTWORTH CO. | | |
| | 293 | A xiv | Boring in, for gas. <i>See</i> Dundas. | | |
| Fishing industry. | | | Limestone in..... | 124, 125 | B xiii |
| L. Superior..... | 147 | viii | Niagara..... | 58 | B xiii |
| Michipicoten div..... | 13 | Bull. iii | Medina and Clinton formations in..... | 57 | B xiii |
| | 128 | viii | <i>See also</i> Waterdown. | | |
| | | | Flame. | | |
| | | | Colour of, affected by minerals..... | 449 | R C |
| | | | Flange=steel. | | |
| | | | Paper on, by Sperry..... | 190-194 | iv |

| | Page. | Vol. | | Page. | Vol. |
|--|----------|--------|---|---------------|--------|
| Flash tests of oil. | 163, 164 | R C | Flint. | | |
| Flashing. | | | Definition of..... | 166 | x |
| In brick-burning, notes by Baker. | | | Occurrences of..... | 198 | ix |
| | 54-56 | A XV | United States, production..... | 525 | R C |
| Flashpoint island, NORTHEAST OF | | | glass. See Glass. | | |
| LACLOCHE ISLAND, L. HURON. | | | lake, L. OF THE WOODS REG., | | |
| Gold and copper on | 114 | R C | R. R. D. | | |
| Flat-rock fall, SEINE RIVER, R. R. D. | | | Gold mining in, 1901..... | 255 | xi |
| Photo of | 224, 225 | X | 1902..... | 94 | xii |
| portage, SOUTH BAY, NIPIGON | | | Shape of..... | 89 | vi |
| LAKE TH. B. D. | | | Lake Gold Co. | | |
| Rocks on, notes and photos, 133, 134 | A XVI | | Capital and date of charter..... | 9 | xii |
| rapid, MONTREAL RIVER, NIP. | | | Claim of, photo..... | 48, 49 | A xiii |
| Hematite from..... | 15 | A XV | Work by, L. of the Woods, 1901. | 255 | xi |
| Flea-bane. | | | 1902. | 94 | xii |
| Abitibi dist..... | 253 | A xiv | 1903. | 63 | A xiii |
| Fleck, A. W. | 23 | A xiv | Flinton, ANGLESEA TP., ADDINGTON | | |
| Fleitmann, Dr. Thomas | | | Co. | | |
| Tests by, on nickel..... | 183 | iv | Mispickel near..... | 105 | xi |
| Fleming, S. E. | 116 | ix | Rock near, notes by Miller. | | |
| | 141 | X | 200, 201, 207 | xi | |
| | 74 | xi | Flintridge, GREENWOOD CO., KAN. | | |
| S. H. | | | Paving clay from, analysis..... | 120 | ii |
| Director, Black Donald Graphite | | | Floating-heart creek, L. SUPERIOR, | | |
| Co | 24 | X | TH. B. D. | | |
| President, Ontario Graphite Co. | 31 | v | Agricultural land along..... | 296 | A xiv |
| | 38 | vi | Drainage area of | 285 | A xiv |
| Sir Sandford | | | Fault at headwaters of..... | 311 | A xiv |
| Description by, of Woodland div., | | | Iron formation near | 336 | A xiv |
| C. P. R..... | 109 | iv | Minor refs. to | 285, 292 | A xiv |
| Ref. to paper by, on beach N. of | | | Rocks on..... | 316 | A xiv |
| Toronto..... | 225 | A xiii | lake, NORTH OF L. | | |
| Phosphate Co. | | | SUPERIOR, TH. B. D. | | |
| Operating in Portland tp..... | 240 | i | Minor ref. to..... | 285, 292 | A xiv |
| Flemming, Peter | | | Rocks on..... | 349 | A xiv |
| Accident to | 24 | ix | Floating islands. | | |
| Experience of, as well-borer.... | 127 | i | L. of the Woods..... | 109 | vi |
| Flesherton, ARTEMESIA TP., GREY CO. | | | Floods. | | |
| Terrace near, altitude. | 177 | ix | Schneeberg, Saxony..... | 75 | B xiv |
| Fletcher, H. | | | Floors. | | |
| Copper mining by, Michipicoten | | | Construction of concrete, rules for. | 180 | A xiv |
| div. | 60 | R C | Flora. | | |
| Dr. James | | | Abitibi Lake dist..... | 242, 243, 253 | A xiv |
| Formulae of insecticide recom- | | | Mattagami valley..... | 150, 151 | R C |
| mended by | 117 | xi | 149-151 | A XV | |
| John | 90 | A XV | Moose River basin..... | 177 | A xiii |
| Fletcher, RALEIGH TP., KENT CO. | | | Moose Factory..... | 107 | iv |
| ..... | 92 | A xvi | Rainy Lake dist..... | 95 | iv |
| Flett, John. | 78 | X | Florence, DAWN TP., LAMBTON CO. | | |
| Flicker or Yellow-hammer. | | | Oil near, discovery..... | 18 | vii |
| Abitibi dist | 126 | A xiii | gold mine, MICHIPICOTEN DIV., | | |
| Flies, black | | | ALG. | 101 | viii |
| Abitibi dist | 190 | viii | Mining Co. | | |
| Notes by Jarvis | 127, 128 | A xiii | Capital and date of charter..... | 29 | A xvi |
| Lake Superior, north shore..... | 147 | viii | Florida, U. S. | | |
| Pukaskwa harbour. | 133 | viii | Apatite deposits of..... | 178 | i |
| Mackenzie creek, Little Wabi- | | | depress prices..... | 238 | i |
| goon lake..... | 54 | v | Sulphur industry in..... | 199 | A xvi |
| Michipicoten div..... | 171 | ii | Flour-mills. | | |
| Missis-sagi river..... | 172 | xii | Keewatin, L. of the Woods..... | 53 | vi |
| Montreal river..... | 53 | A xvi | Flower, LAVANT TP., LANARK CO. | | |
| house | | | Mica schist between, and Lavant. | 101 | B xiii |
| Timagami Lake reg. (February). | 58 | R C | Floyd - ? | 53 | v |
| sand | | | Silver Mines Ltd. | | |
| Abitibi dist., notes by Jarvis.... | 128 | A xiii | Capital and date of charter..... | 28 | A xvi |
| Lake Superior, north shore | 133, 147 | viii | Fludyer, Charles | | |
| Mackenzie creek, Little Wabi- | | | Evidence by, re royalties in Corn- | | |
| goon river..... | 54 | v | wall, Eng..... | 33 | i |
| Flinn, P. | 43, 48 | xii | | | |

| | Page. | Vol. |
|--|-----------------|------|
| Fluo-hydric acid. | | |
| For etching on glass..... | 447 | R C |
| Fluor island, NIPIGON BAY, L. | | |
| SUPERIOR. | | |
| Fluorite on..... | 198 | ix |
| Fluorspar or Fluorite. | | |
| Apatite districts..... | 442 | R C |
| Crystals of, exhibited at World's | | |
| Fair..... | 187 | ii |
| Description of..... | 533 | R C |
| Determination of..... | 205, 222 | vi |
| Hardness of..... | 448, 535 | R C |
| | 201 | vi |
| | 214 | vii |
| Lake Superior..... | 194 | ii |
| copper-bearing rocks..... | 131 | vi |
| Nipigon bay..... | 198 | ix |
| Madoc (near), mining..... | 106 A | xv |
| Ross tp..... | 198 | ix |
| Silver Mountain dist: | | |
| Rabbit Mt. mine..... | 57 B | xiv |
| with silver..... | 198 | R C |
| - Specific gravity of..... | 202 | vi |
| United States, production, 1888.. | 525 | R C |
| Flux. | | |
| Quartz for, Sudbury dist..... | 26 A | xvi |
| Treatment of, for iron ores..... | 479 | R C |
| Flying-loon lake, R.R.D. | | |
| Geology of, and vicinity..... | 163-165 | vii |
| Pleistocene deposits near..... | 173 | vii |
| Rocks near..... | 176 | vii |
| Post, MATAGAMING LAKE, ALG. | | |
| Iron ore near..... | 9 A | xiii |
| Minor ref. to..... | 132, 133 | ix |
| Rocks on route to, from Biscota- | | |
| sing..... | 106 | xii |
| brook, MISSINAIBI RIVER, ALG. | | |
| | 139 | ix |
| Flynn, M. J. | | |
| Manager, Richardson corundum | | |
| mine... 101 A | xv | |
| feldspar | | |
| mine... 54 A | xiii | |
| | 89 A | xiv |
| | 39, 41 A | xv |
| | 85 A | xvi |
| F M 131, 132 gold locs. See Anglo | | |
| Canadian Gold Estates. | | |
| 145 gold loc. See Gold | | |
| Sun mine. | | |
| 206 gold loc. See Sulli- | | |
| van, Alan | | |
| 207 gold loc., STURGEON | | |
| LAKE, TH. B. D..... | 87 | xii |
| Fogg, S. G..... | 82 | ii |
| Foley, James | | |
| <i>See also Foley Bros</i> | | |
| Part owner, Gold Mountain mine. | 187 | v |
| Foley, John | | |
| Manager, Breitung Iron Co..... | 263 | xi |
| <i>See also Foley Bros.</i> | | |
| Joseph C. | | |
| Gold mining by, near Mine | | |
| Centre..... | 228 | iv |
| | 65, 157-159 | v |
| | 55, 81, 260-263 | vi |
| | 68, 69 | vii |
| | 23 | viii |
| | 243 | xi |
| Manager, Avon gold mine..... | 58 A | xiv |

| | Page. | Vol. |
|---|-------------------|------|
| Foley Bros. | | |
| Acknowledgments to..... | 60 | xii |
| Glendower iron mine worked by. | 227 | v |
| Gold mining by, Round lake..... | 118 | v |
| Helen iron mine operated by. | 54, 67, 71 | xi |
| gold mine, NEAR MINE CENTRE, | | |
| R. R. D. | | |
| Accident at, 1897..... | 31 | vii |
| 1898..... | 23, 24 | viii |
| 1900..... | 44 | x |
| Depth of, 1898..... | 35 | ix |
| Granite in..... | 116 | vi |
| altered..... | 87 | v |
| Idle, 1898..... | 84, 274, 277, 281 | viii |
| Notes on, 1896..... | 5 Bull. i | |
| 54-56, 81, 260, 261 | vi | |
| 1897..... | 129 | vii |
| 1898..... | 68-70 | vii |
| 1900..... | 81, 82, 94, 95 | x |
| 1901..... | 243 | xi |
| by Blue..... | 157-159 | v |
| Coleman..... | 66, 67 | v |
| Photos of..... | 96, 97 | vi |
| Report on, by H. V. Winchell. | 228-230 | iv |
| Sale of, to English Co., pending. | 7 | vii |
| | 21 | viii |
| Section of..... | 69 | vii |
| Vein of, character..... | 262 | viii |
| iron mine, BATHURST TIL, | | |
| LANARK CO. | | |
| Apatite, calcite and diorite in..... | 51-54 | ii |
| Iron ore in, character..... | 45-48 | ii |
| titaniferous..... | 51 | ii |
| Limestone in..... | 46 | ii |
| Mines Co. | | |
| Formation of, and capital..... | 8, 55 | vii |
| pyrites mine, N. OF ESTERIDGE | | |
| STATION, BAY OF QUINTE R'Y. | | |
| Notes on, by Fraleck..... | 164, 165 A | xvi |
| tp., PARRY SOUND DIST. | | |
| Cobalt in..... | 93 | vii |
| Copper in..... | 93 | vii |
| mining..... | 167, 168 | ix |
| | 116 | xii |
| prospecting..... | 261 | viii |
| <i>See also McGown mine.</i> | | |
| Gold mining in:— | | |
| notes by Coleman..... | 98-100 | iv |
| <i>See also McGown in</i> | | |
| VanKoughnet m. | | |
| Iron in, boring for..... | 44, 45 A | xiii |
| Limestone in..... | 94, 95 B | xiii |
| Nickel in..... | 93 | vii |
| Folger, B. W. | | |
| <i>See also Amy and Folger mica mine.</i> | | |
| Evidence by, before R. C. n:— | | |
| cost of producing iron..... | 391 | R C |
| free-trade..... | 223 | R C |
| iron properties, kingston dist. | 135 | R C |
| ref. to..... | 58 | ii |
| Interested in Calabogie Co..... | 136 | R C |
| Manager, Tip Top copper mine.. | 275 | xi |
| Henry | | |
| <i>See also Hammond, James</i> | | |
| Interested in Hammond Gold- | | |
| Reef mine..... | 64 | vii |
| | 76 | ix |

| | Page. | Vol. | | Page. | Vol. |
|--|----------|------|--|------------|------|
| Folger, Henry <i>— Com.</i> | | | Forest fires. <i>— Com.</i> | | |
| Interested in Tip Top copper mine | 86 | ix | Lac des Mille Lacs | 136 | v |
| M. H. | 275 | xi | Lac Seul | 61 | v |
| W. M. | 178 | iii | Lake of the Woods, Sultana island | 14 | iii |
| Nickel-steel employed by, for ordnance | 168 | ii | Mann tp. | 227 A | xiv |
| Iron prospecting by, Matawin range | 67-69 | ii | Mattagami valley | 193, 194 A | xiv |
| Mills, S. D. employed by, | 99 | ii | 124, 140 A | xv | |
| Hammond Mines Co. | 9 | vii | Methuen tp. | 209 | viii |
| (See also Hammond Reef gold mine) | 76 | ix | Michipicoten div. | 12 Bull. | iii |
| Folgerite. | | | 206 | vii | |
| <i>See also</i> Whartonite. | | | 296 A | xiv | |
| Composition of | 170 | ii | Helen mine, near, photo | 64, 65 | xi |
| Exhibited at World's Fair, | 192 | ii | Mamainse pen. | 72 | iii |
| Sudbury dist. | 281 | xii | Mining industry affected by, | 262 | R C |
| McDonnell in | 160 C | xiv | Minnitaki lake | 172 | vii |
| Worthington m., notes by Emmens | 167, 168 | ii | Missinaibi valley | 139, 142 | ix |
| Foljambe — ? | 22 | i | Mississagi river | 167, 168 | xi |
| Folk lore. <i>See</i> Indian superstitions. | | | Moose River basin | 120 | iv |
| <i>Fossil</i> (fossil moss). | | | 177 A | xiii | |
| Ottawa (near) | 225 | x | Nivens base line, Alg | 141, 142 | ix |
| Fool's gold. <i>See</i> Iron pyrites. | | | Opasatika river | 256 | v |
| Foote, Dr. A. E. | | | Pishkanogama valley | 135 | ix |
| Description by, of sphene, Egansville | 209 | ix | Prevention of, in mineral dists. . | 307 | R C |
| Ref. made by, to zircon in Sebastopol tp. | 212 | ix | Rainy Lake dist., intensity of | 44, 96, | 97 |
| Zenochloite described by, | 212 | ix | Raglan tp. | 223 | viii |
| Forbes, George | 52, 57 | xi | Rice lake, north of | 131 | ix |
| Robert | | | Seine River dist. | 139, 140 | v |
| Director, Parry Sound Copper Mg. Co. | 100, 164 | ix | 74 | vi | |
| Manager, McGowan copper mine. . | 259 | viii | Atikokan river. . | 142, 144 | v |
| William | 76 | viii | Brulé lake | 137 | v |
| Ford, Charles | | | Sabawe lake | 73 | v |
| Gold mining by, Wanapitei Lake dist. | 140 | vii | Steep-rock lake | 72 | v |
| W. H. & Co. | | | Turtle river | 127 | vii |
| Notes by, on trap-rock from Bruce Mines | 14 | v | Windigoostigwan lake | 137 | v |
| Foreman of mines. | | | Spanish river | 125 | ix |
| Qualifications of | 29 | viii | Sudbury dist. | 106 C | xiv |
| Forest. | | | Onaping lake, near | 154 | x |
| Conservation of, notes by Blue. . | 206 | v | Thunder Bay dist. | | |
| Occurrences. <i>See</i> Trees. | | | notes by Blue | 205 | v |
| R. W. and William | | | Pigeon River dist. | 146 | ix |
| Of McArthur Forest process <i>See</i> Cyaniding. | | | Shelbandown lake | 117 | v |
| Forest, Plympton tp., Lambton co. | | | of Dean, ENGLAND. | | |
| Boring in, for water | 59 | i | Royalties in | 38 | i |
| fires. | | | Reserve Mg. Co. | | |
| Algoma dist., notes by Blue and Macdonald. . | 206 | v | Capital and date of charter. | 28 A | xvi |
| Blanche River region 215, 216, 222, 223 | | xi | Forgings. <i>See</i> Castings and Forgings. | | |
| Causes of | xx | R C | Forks, The, KENOGAMI RIVER, ALG. | | |
| 177 A | xiii | | Rocks in vicinity of | 32 B | xiii |
| Chapleau, near | 132, 141 | ix | of Credit. <i>See</i> Credit Forks. | | |
| Cobalt lake, photo | 72 B | xiv | Formation. | | |
| Destruction by | 53 | i | Definition of term. | 3, 534 | R C |
| Eby tp. | 179 | xii | Formosa, CARRICK TP., BRUCE CO. | | |
| Effects of, on copper ores | 197 | ix | Boring at, for gas, proposed | 21 | x |
| Fourth base line, R. R. d. | 181 | vii | <i>Forax ledensis.</i> | | |
| | | | Greens creek, near Ottawa | 224 | x |
| | | | Forneri, C. C. | | |
| | | | Homer tp., surveyed by | 138, 139 | viii |
| | | | S. S. | | |
| | | | Manager, Eldorado gold mine. . | 53 A | xv |
| | | | Part owner, Baden Powell mine. . | 96 | x |
| | | | 54 A | xv | |
| | | | Forster, John H. | | |
| | | | Ref. to history by, of Silver islet. . | 142 | vi |
| | | | Forsyth, — (?) | 198 | v |
| | | | & Co. | | |
| | | | Iron mining by, Hull, Que. | 34 | ii |

| | Page | Vol. | | Page | Vol. |
|--|----------|------|--|------------|------|
| Forsythe—(?) | 58 | xii | Fort Mattagami, MATTAGAMI LAKE, | | |
| Island, ST. LAWRENCE RIVER. | | | ALG. | | |
| Granite quarrying on..... | 296, 297 | xi | Altitude of..... | 181 | x |
| Fort Albany, ALBANY RIVER, KEE. | | | Fur trade at, 1903..... | 127 A | xiii |
| Building of, date..... | 196 | v | 1904..... | 242 A | xiv |
| Mission at..... | 192 | viii | 1905..... | 131, 151 A | xv |
| Summer temperature at..... | 106 | iv | Indians at, photos..... | 128, 129 | ix |
| Caminstoygan, KAMINISTIK- | | | Insects at..... | 129 A | xiii |
| WIA RIVER, TH. B. D. | 197 | v | Jackpine plain at, photo..... | 219 A | xiv |
| Charlotte, PIGEON RIVER, TH. | | | Minor refs. to..... | 121 A | xiii |
| B. D. | | | 116 A | xv | |
| Historical notes on..... | 198 | v | Photo of..... | 128, 129 A | xiii |
| Churchill, HUDSON BAY, KEE. | | | Route to, from Metagama, des- | | |
| Harbour of, notes on..... | 132 | iv | cription..... | 125-127 | ix |
| Limestone near, fossiliferous.... | 85 B | xiii | 185 | x | |
| Sandstone at..... | 86 | i | Michipicoten, L. SUPERIOR, | | |
| Erie, BERTHIEP, WELLAND CO. | | | ALG. | 192, 193 | v |
| Natural gas delivered to..... | 44 | xi | Payne, ALABAMA | 146 | iii |
| 21, 91 A | xiv | | Pitt Iron Works, PITTSBURG, | | |
| Frances, RAINY RIVER. | | | Labour employed at, statistics... 370 | R C | |
| Appearance of..... | 43 | iv | Rouille, NOW TORONTO. | | |
| Country between, and Mine | | | Date of building..... | 196 | v |
| Centre, notes by Blue..... | 160, 161 | v | For other refs. <i>See</i> Toronto. | | |
| Escarpment near, description... 91 | v | | St. Pierre, NOW PITHIER PT. | | |
| Fossils near..... | 147 | xi | Built by Verandrye..... | 197 | v |
| Half-breed of..... | 98 | iv | Historical notes..... | 162 | v |
| History of, by Langevin..... | 162 | v | For other refs. <i>See</i> Pithier pt. | | |
| Indian reserves at, area..... | 167 | v | William, KAMINISTIKWIA | | |
| Iron ore near..... | 135 | xi | RIVER. | | |
| in sandstone..... | 184 | ix | Agricultural land near..... | 207 | v |
| petrographical notes..... | 143 | xi | Bricks, at, price of, 1903..... | 15 A | xiii |
| Lock at..... | 65 | R C | Historical notes on..... | 198, 199 | v |
| Nomenclature of..... | 40 | iv | Magnetite near..... | 299 | xii |
| Notes on, by Blue..... | 161 | v | Railway from, to Atikokan range, | | |
| Peat plant erected at..... | 23 A | xiv | projected..... | 133 | v |
| Photo of sketch of, 1857..... | 80, 81 | v | Winnipeg, opened '83, 171 | v | |
| Rocks at and near:— | | | Rocks at, and near:— | | |
| conglomerates, description... 152 | vii | | iron formation..... | 114 A | xvi |
| Couchiching..... | 158, 165 | viii | notes by Coleman..... | 150 | ix |
| notes by Coleman..... | 153 | vii | Route to, from Windsor, notes | | |
| petrography..... | 80 | iv | by Blue..... | 106-112 | v |
| quartz-diorite..... | 78 | iv | Time at, set back..... | 113 | v |
| sandstones, notes..... | 183, 184 | ix | Wrangel, ALASKA. | | |
| Site of, beautiful..... | 197 | v | Garnets from..... | 228 | vi |
| Waterpower at..... | 14 A | xv | York. See York Factory. | | |
| Hematite Co. | | | Fortune, W. F. | 87 | viii |
| Capital and date of charter..... | 9 | xii | Forty-mile creek, LINCOLN CO. | | |
| Mining Co. | | | Limestone quarries on..... | 97 | i |
| Capital and date of charter..... | 9 | vii | <i>See also</i> Grimsby. | | |
| Mining div. | | | river, JAMES BAY, NIP. | 192 | viii |
| Creation of..... | 36 A | xvi | Fossils. | | |
| Description of..... | 44 A | xvi | Abitibi river..... | 187-189 | viii |
| Frontenac, NOW KINGSTON. | | | Jawbone creek..... | 182 | viii |
| Date of building..... | 196 | v | Beachville (near)..... | 92 B | xiii |
| For other refs. <i>See</i> Kingston | | | Bertie tp..... | 119 B | xiii |
| Holmes, L. HURON, U. S. | 109 | v | Bosanquet (Hamilton formation) 422 | R C | |
| Hope, EABAMET LAKE, KEE. | 192 | viii | Brockville, near, shells..... | 242 A | xiii |
| Island, L. OF THE WOODS, R. | | | Cambrian, notes by Bell..... | 31 | R C |
| R. D. | | | Cobourg (Trenton)..... | 40 B | xiii |
| Photo of H. B. C. post on..... | 128, 129 | v | Corniferous formation..... | 46 | R C |
| Matachewan, MONTREAL | | | Desjardins canal and Dundas bay, | | |
| RIVER. | | | 228, 229 A | xiii | |
| Barley grown at..... | 57 | R C | Don river..... | 230 A | xiii |
| Glacial deposits near..... | 183 | vi | Emerald lake, Nip..... | 87 B | xii |
| Photos of..... | 184, 185 | viii | Fort Frances, near..... | 147 | xi |
| Route to, from Black river..... | 110 A | xiii | Hamilton (Niagara)..... | 423 | R C |
| Vegetables grown at..... | 240 A | xiv | (sponges)..... | 141 | xii |
| | | | James Bay (Niagara)..... | 44 | R C |
| | | | (shells)..... | 143 A | xiii |

| | Page. | Vol. | | Page. | Vol. |
|--|-----------|--------|---|---------|--------|
| Fossils. <i>Con.</i> | | | Fostoria, SENECA CO., OHIO, U. S. | | |
| Kawanaska river, near | 186 | xii | Gas supplied to, from Findlay... 123 | i | |
| Kwataboahagan river, paper by Parks..... | 180-191 | A xiii | Foullon, Baron von | | |
| Lac Seul..... | 92 | v | Refs. to work by, on Sudbury ores.....3, 11, 16, 52 | 107 c | xiv |
| Lake Superior, north shore | 156 | viii | Views of, <i>re</i> Sudbury deposits... 278 | xii | |
| Manitoulin island..... | 86 | i | Foundry iron. <i>See</i> Iron. | | |
| Gore bay..... | 84 | B xiii | Fountain lake, Moss tp., TH. B. D. ... | 120 | v |
| Maryville, near | 77 | B xiii | Fouque, F. A. | 227 | vii |
| Mattagami valley, in erratics..... | 135 | A xv | Fourteen Island lake, LOUGH-BOROUGH TP., FRONTENAC CO. | | |
| Missinaibi river..... | 162 | A xiii | Feldspar mining on..... | 138 | xii |
| Nassagaweya tp..... | 57 | B xiii | Fournier, H. A. | 103 | vii |
| New Caledonia, insects..... | 119 | ii | | 66 | xii |
| Ogdensburg, N. Y..... | 242 | A xiii | | 48 | A xiii |
| Ontario, marine beaches..... | 216-227 | x | iron mine, N. CROSBY TP., LEEDS CO. | | |
| southwest, paper by Parks..... | 141-156 | xii | Metallic iron in, percentage of... 45 | ii | |
| Ottawa..... | 32 | B xv | Minor ref. to..... | 44 | ii |
| Port Colborne (corals)..... | 14 | B xiii | Notes on, by Morris..... | 137 | R C |
| (Corniferous)..... | 35 | xi | Vennor | 50 | ii |
| Post-Tertiary deposits, notes by Bell..... | 50 | R C | Fourth base line, R. R. D. | | |
| Potsdam formation..... | 40 | R C | Geology of..... | 166-169 | vii |
| Prince Edward co. | 27 | B xiii | meridian line, R. R. D. | | |
| St. Marys, near..... | 96 | B xiii | Geology of..... | 164-166 | vii |
| Saxicava sand, list of..... | 32 | B xv | Fowke, George W. | 51 | xii |
| Thedford (Devonian)..... | 8, 32, 75 | B xv | Fownes, George | | |
| notes and species..... | 69 | B xiii | Cyanogen discovered by..... | 142 | iv |
| Thorold..... | 117 | B xiii | Fowle, J. C. | | |
| Toronto..... | 230 | A xii | Ref. to treatment by, of iron ore, Mich..... | 339 | xii |
| Trent river..... | 89 | B xiii | Fowler, James. | 216 | i |
| Valne of, to a Survey..... | 422 | R C | Dr. Joseph. | 60 | ix |
| Victoria co. (Trenton)..... | 113 | B xiii | | 47 | A xiv |
| Foster, A. B. | 103 | vii | mansion, GOUVERNEUR, N. Y. | | |
| Dr. Albert | | | Limestone of, quality..... | 80 | R C |
| Oil on farm of, Mersea tp..... | 116 | A xiv | | 63 | B xiii |
| C. A. See Foster silver mine. | | | Fowls (hens). | | |
| Hon. George E. | 46, 80 | viii | Eggs of, hatched by Gulls, Caribou island | 132 | viii |
| J. J. | 55 | vii | Fox. | | |
| Joseph C. | 221 | viii | Abitibi dist | 193 | viii |
| LeNeve | | | Hinterland, The..... | 133 | iv |
| Quotation from, <i>re</i> nickel..... | 178 | iv | Michipicoten div..... | 297 | A xiv |
| Visiting Canada, with Brit. Ass'n..... | 144 | vii | Nipigon Lake dist. (reported)... | 139 | A xvi |
| O. E. | 44, 68 | viii | Timagami Lake dist..... | 58 | R C |
| S. P. | 118 | B xv | Fox, C. B. | | |
| William. | 29 | iv | Analysis by, of Sudbury rocks .. | 117 | c xiv |
| Cobalt Mfg. Co. | | | Notes by, on limestone used by Hamilton Steel and Iron Co .. | 13 | B xiii |
| Capital and date of charter | 28 | A xvi | Edwin W. | 143 | ii |
| Dividend paid by, 1906..... | 13 | A xvi | James | | |
| Minor ref. to | 84 | A xv | Iron mining by, Madoc tp..... | 31 | viii |
| <i>See also</i> Foster silver mine. | | | John | | |
| lake, CARLOW TP., HASTINGS CO. | | | Operating salt, Park Hill | 111 | ix |
| Corundum near..... | 221 | viii | S. J. | | |
| Crystalline limestone on..... | 222 | viii | Brick works of, notes and photos..... | 100-102 | B xv |
| Hills around, notes..... | 220 | viii | gold mine, MADOC TP., HASTINGS CO. | | |
| rapid, YORK BRANCH RIVER. | | | | 111 | R C |
| Corundum near..... | 84 | A xvi | lake, L. OF THE WOODS REG., R. D. | | |
| Marble from, analysis | 65 | B xiii | lake, NEAR ROSSPORT, TH. B. D. | 60 | ix |
| Position of..... | 221 | viii | Nickel mining near..... | 109 | x |
| silver mine, COBALT DIST., NIP. | | | rapid, NETTOGAMI RIVER, MOOSE RIVER. | | |
| Bismuth from..... | 45 | A xv | Description of river near..... | 137 | A xiii |
| Fire at..... | 52 | A xvi | tp., NIP. | | |
| Notes on, 1905 | 84, 85 | A xv | Soil and timber in..... | 126 | A xv |
| Position of..... | 7 | A xv | glacial drift..... | 127 | A xv |
| Profits of, supply plant..... | 9 | A xv | | | |
| Shipping, 1905..... | 15 | B xiv | | | |
| 1906..... | 8 | A xvi | | | |

| | Page. | Vol. | | Page. | Vol. |
|--|--------------|--------|--|--------------------|--------|
| Foxton, Fred | | | France.—<i>Con.</i> | | |
| See Devil Lake mica mine. | | | Mining laws of..... | 296 | R C |
| Foxton, James and Bros. | | | schools in..... | 420, 497-499 | R C |
| Foxton apatite mine. | | | Nickel coinage in..... | 164 | C xiv |
| James | | | imports of, 1893-98..... | 215 | viii |
| See also Foxton, James and Bros. | | | plating in, process of..... | 158 | ii |
| Foxton apatite mine. | | | Ochre producers, largest..... | 170 | A xvi |
| Evidence by, <i>re</i> apatite in Lough- | | | Peat in, notes on..... | 212 | ii |
| borough tp..... | 53, 171 | R C | Phosphate in..... | 441 | R C |
| James and Bros. | | | Frances Gold Mines, Ltd. | | |
| Mica mining by, Sydenham..... | 249 | ii | Exhibits of, at Buffalo..... | 25 | A XV |
| apatite mine, LOUGHBOROUGH | | | iron mine, PAINÉ LAKE, MICH- | | |
| TP., FRONTENAC CO. | | | PICOTEN DIV. | | |
| Banded structure of veins in..... | 439 | R C | Boring at, with diamond drill..... | 62, 63, 104 | xii |
| Gypsum in..... | 199 | ix | Canoe routes to..... | 289, 290 | A xiv |
| Notes on, 1891..... | 239 | i | Idle, 1903..... | 47 | xiii |
| 1892 (idle)..... | 251 | ii | Minor ref. to..... | 285 | A xiv |
| by J. Foxton..... | 53, 171, 172 | R C | Notes on, 1901..... | 71, 95 | xi |
| Merritt..... | 168 | R C | by J. M. Bell..... | 328, 329 | A xiv |
| G. Richardson..... | 170 | R C | Rocks at and near..... | 302, 303, 314, 315 | A xiv |
| Section of..... | 168 | R C | Trough near..... | 339 | A xiv |
| Selenite in..... | 208 | ix | Francis, G. F. | | |
| Wilsonite in..... | 212 | ix | Gold mining by, Michipicoten | | |
| Phosphate Mining Co. | | | div..... | 66, 80 | xii |
| Capital and date of charter..... | 8 | vii | Licence to..... | 141 | x |
| Foy, Charles..... | 54 | A xiii | 74..... | 74 | xi |
| Hon. James Joseph | | | 66..... | 66 | xii |
| Transmittal letter to and from, | | | 48..... | 48 | A xiii |
| 1902..... | xv, xvi | A xiv | J. B. | | |
| tp., SCARBURY DIST., NIP. | | | On water power in manufactur- | | |
| Rocks in..... | 274 | xii | ing..... | 485 | R C |
| nickel-bearing eruptive..... | 213 | A xiii | Franco Belge Iron Co. (SPAIN)..... | 121 | ii |
| offset deposits..... | 50, 63, 70, | 114 | Frank J. G. | 103 | vii |
| <i>Fragaria vesca.</i> | | | C. G. & Sons. | | |
| Abitibi dist..... | 241 | A xiv | Brick-yard of, Strathroy..... | 79 | B XV |
| " <i>virginiana.</i> | | | Frankford, SYDNEY TP., HASTINGS CO. | | |
| Abitibi Lake dist..... | 241 | xiv | Iroquois beach near..... | 232 | A xiii |
| Mattagami valley..... | 150 | A XV | Frankland, Sir Edward..... | 492 | R C |
| * Fraleck, E. B. | | | Franklin, Joseph..... | 133, 134 | x |
| Evidence by, before R. C. <i>re</i> — | | | 126..... | 126 | xii |
| gold in Madoc tp..... | 111 | R C | co., KAN. | | |
| slate in..... | 87, 88 | R C | Paving clay from, analysis..... | 120 | iii |
| technical education..... | 427 | R C | station, LANARK CO. | | |
| Manager for Br. Am. Pyrites Co. | 79 | A xiv | Corundum mining near..... | 38 | xi |
| Mica mining by, Loughboro tp..... | 92 | A xiii | Rocks near..... | 217 | x |
| Reference to surveys by, Matta- | | | Franklinite. | | |
| gammi river..... | 181 | A xvi | Madoc tp..... | 198 | ix |
| Report by, on Iron Pyrites in | | | Magnetic permeability of..... | 324 | xii |
| Ontario..... | 149-201 | A XV | Franks, William J. | | |
| ref. to..... | 20 | A XV | Gold mining by, L. of the Woods..... | 25 | iii |
| 22..... | 22 | A xvi | Fransen, John, August and Eric..... | 163 | v |
| Frac, S. F. | 42, 73 | viii | Fransewa landing, YORK BRANCH | | |
| France. | | | RIVER..... | 131 | x |
| Armour plate trials in..... | 155, 162 | iii | Frasch, Hans A. | | |
| "Balance of trade" against, 1868- | 198 | iv | Attempt by, to smelt Sudbury | | |
| 1886..... | 397 | R C | ores..... | 141 | C xiv |
| Cement exports to Canada, 1901. | 33 | xi | Furnace of, for pyrites ores..... | 194 | A xvi |
| 1902..... | 34 | xii | Nickel-refining process of..... | 36 | x |
| Cobalt imports from New Caledo- | | | Services of, obtained for Nickel- | | |
| nia..... | 73 | B xiv | Copper Co..... | 222 | ix |
| Competitor of England, in Can- | | | Fraser, A. W..... | 120 | vii |
| ada, notes..... | 196, 197 | v | 52..... | 52 | viii |
| Glass-making in, mixtures used | | | C. W..... | 59, 60 | viii |
| in..... | 118, 119 | xi | Duncan..... | 164, 165 | v |
| Iron in, production, 1888..... | 224 | R C | Isaac (1826)..... | 20 | ii |
| pyrites..... | 192 | A xvi | John..... | 26 | v |
| royalties on..... | 19 | i | | | |
| Mica market in, for Canada..... | 23 | A xvi | | | |

| | Page. | Vol. | | Page. | Vol. |
|---|----------------|------|--|------------|-------|
| Fraser bay, L. HURON. | | | Freda Larder Lake Gold Mg. Co. | | |
| Dabase dikes on | 76 | i | Capital and date of charter | 28 A | xvi |
| Quartzite south of | 72 | i | Freek, W. | | |
| lake, VERMILION RIVER, NIP. | | | Brick-yard of, Barrie, notes | 99 B | xv |
| Gold on, alluvial | 257 | vii | Freeman, T. T. | | |
| Navigation near, difficult | 156 | x | Mica mining by, Ferguson tp | 279 | v |
| <i>Fraxinus stambucifolia.</i> See Ash, black | | | Freeman feldspar mine, PORTLAND | | |
| Frazer, Dr. Persifor | | | AND LOUGHBOROUGH TPS., | | |
| Notes by, on corundum in Ilmen | | | FRONTENAC CO. | | |
| mts. | 213 | vii | Nobs on, 1902 | 138 | xii |
| and Logan. | | | mica mine, LOUGHBORO' TP., | | |
| Brick-yard of, at Blyth | 2, 70 B | xv | FRONTENAC CO. | | |
| bay, GEORGIAN BAY, L. HURON. | | | Minor ref. to | 134 | x |
| Copper ore near | 9, 91 | i | 12 A | xiii | |
| Frederick House, FREDERICK HOUSE | | | Notes on, 1904 | 85 A | xiv |
| LAKE, NIP. | | | 1906, and photos | 89, 90 A | xvi |
| Route from, to Abitibi river, des- | | | Operating, 1905 | 103 A | xv |
| cription | 106-108 A | xiii | tp., P. S. D. | | |
| (Hollow sand) lake, ABITIBI | | | Copper prospecting in | 121 | x |
| RIVER | | | Freiberg, SAXONY. | | |
| Glacial drift on | 187 A | xiv | Arsenic mining in | 101 | xi |
| striae | 115 A | xiii | works in, description 108, 110 | | xi |
| Indian hut on, photo | 239 A | xiii | School of Mines, at | 500 | RC |
| Lead-gall at | 129 A | xiii | metallurgical course, | | |
| Notes on, by Kay | 108 A | xi i | notes | 417 | RC |
| Parks | 177 | viii | notes on, 1890 | 212 | i |
| Rocks on and near | 199 A | xiv | Fremlin, William C. | | |
| porphyrite | 120 A | xii | French, A. | | |
| Sandy tracts N. of | 192 | viii | John | | |
| Storms on | 123 A | xiii | 46, 50 | | x |
| Trees on and near | 123, 125 A | xiii | French narrows, L. OF THE WOODS, | | |
| Vegetables grown at | 240 A | xiv | R. R. D. | 181 | v |
| river, ABITIBI RIVER. | | | 93 | | vi |
| Ballast near, for railways | 207 A | xiv | portage, L. OF THE WOODS, | | |
| Brick-clay along | 207 A | xiv | R. R. D. | | |
| Cascade on, photo | 126, 225 A | xiv | Route to, from Mud lake, | | |
| Glacial drift on | 187 A | xiv | description | 115, 116 | vii |
| striae | 115 A | xiii | river, GEORGIAN BAY, L. HURON. | | |
| Moose on | 127 A | xiii | Area of Ontario south of | 182 A | xvi * |
| Notes on, and on basin of, by:— | | | Building-stone (granit) near | 84, 93 | i |
| Kay | 108 A | xiii | Copper south of | 169 | ix |
| McMillan | 186, 195-199 A | xiv | Lumbering on | 119 | iv |
| Parks | 177-180 | viii | Minor ref. to | 201 | v |
| Photos of | 184, 185 | viii | Notes on, by Bell | 66, 67 | i |
| Report, by Kerr, on country E. | | | river, MOOSE RIVER. | | |
| of | 124-127 A | xv | Landslides on | 147 A | xiii |
| Rocks on | 198, 210 A | xiv | Muskegs near mouth of | 190 | viii |
| peridotite | 211 A | xiv | Notes on, by J. M. Bell | 137 A | xiii |
| Soil on and near | 235, 244 A | xiv | Parks | 192 | viii |
| agricultural | 207 A | xiv | Rocks on | 138, 142 A | xiii |
| analysis | 246, 247 A | xiv | Frenchman head, LOST LAKE, R. R. D. | | |
| Trees on and near | 125 A | xiii | Notes on, by Coleman | 60 | v |
| 196, 197, 224, 225, 235 A | | xiv | Striae on | 88 | v |
| pine | 207 A | xiv | Vegetables grown at | 182 | vii |
| Waterpower on | 193 | viii | lakes, HANMER AND WISNER | | |
| 208, 209 A | | xiv | TPS., NIP. | | |
| Fredericksburg, FREDERICKSBURG | | | Minor ref. to | 71 C | xiv |
| TP., LENOX CO. | | | Moraine near | 102 C | xiv |
| Altitude of | 222 | x | Rocks on, sedimentary | 202 A | xiii |
| Free trade. | | | 72 C | | xiv |
| See also Dingley tariff bill. | | | Terraces south of | 106 C | xiv |
| McKinley tariff bill. | | | Frenchmen rapid, MICHIGICOTEN | | |
| Tariffs. | | | RIVER, ALG. | 190 | vii |
| Advantages of, in mining. | 227-239 | RC | Freuse, T. C. | | |
| Fredonia, CHATTAUGUA CO., N.Y. | | | Mica mining by, Ferguson tp. | 279 | v |
| Corniferous formation at, thick- | | | Frick and Lindsay. | | |
| ness | 130, 156 | i | 119 | | ii |
| Freeborn mica mine, LOUGHBORO' | | | Frid, George | | |
| TP., FRONTENAC CO. | 135 | x | Brick-making by, Hamilton | 29 | xii |
| | | | 106 B | | xv |
| | | | Friday, George (Indian) | 158, 162 | xii |

| | Page. | Vol. | | Page. | Vol. |
|--------------------------------------|---------------|--------|--|----------------|------|
| Friese, Hans | | | Frosse, Ulrick | | |
| Cobalt business of, Saxony..... | 83-87 | R xiv | Copper smelting by..... | 1586, 374, 376 | R C |
| Frigido. | | | Frost, W. H. | | |
| Pyrrhotite from, analysis..... | 163 | ii | Iron works of, Smiths Falls..... | 329 | R C |
| Frikovitch, Toni | 39, 41 | A xiii | Frue, William Bell | | |
| Froath, Charles | 31 | vii | Huronian gold mine partly owned | | |
| Froding magnetic separator. | | | by..... | 123 | v |
| Notes on..... | 341 | xii | Inventor of Frue vanners, <i>which</i> | | |
| Frontenac co. | | | <i>see</i> | 151 | vi |
| Apatite in..... | 436 | R C | Photo. of..... | 128, 129 | vi |
| character..... | 439-442 | R C | President, Jackfish Lake Mg. Co. | 76 | v |
| <i>See also</i> Bell's apatite mine. | | | Silver Islet mine worked by..... | 195 | R C |
| Corundum in..... | 205, 225, 227 | viii | 141-148 | vi | |
| Feldspar mining in..... | 21, 86 | A xvi | Tribute to..... | 150 | vi |
| Iron ores of..... | 45, 47 | ii | vanner. | | |
| chromium in..... | 233 | vii | Concentration by, of corundum, | | |
| origin..... | 57 | ii | notes by De Kalb..... | 241, 242 | vii |
| views of S. D. Mills. | 102 | ii | Description of..... | 151, 152 | vi |
| Rocks of, limestone, notes by | | | Invention of..... | 151 | vi |
| Miller..... | 43 | xiii | Fruit. | | |
| marble, distribution. | 80 | R C | Peat for packing..... | 122 | iv |
| Potsdam formation.. | 40 | R C | industry. | | |
| Vennors' classification. | 43 | ii | Sulphuric acid for..... | 197 A | xvi |
| Sulphur in galena ores of..... | 22 A | xvi | trees. | | |
| Topography of, character..... | 437 | R C | Insecticide for, formulae..... | 117 | xi |
| lead mine, LOUGHBORO TP., | | | Fruit-land, SALTFLKET TP., WEST- | | |
| FRONTENAC CO. | | | WORTH CO. | | |
| Concentrating mill at, photo.... | 92 A | xv | Brick yard in, notes..... | 105 B | xv |
| Notes on..... | 240 | i | Brick and Supply Co. | | |
| 78, 79 A | xvi | | Capital and date of charter..... | 24 A | xiv |
| by Machar..... | 145, 146 | R C | Brick Co. | | |
| Opened up, 1879..... | 11 A | xiii | Notes on yard of..... | 101 B | xv |
| Ore from, analysis..... | 94 A | xiii | Fruitport, NEAR GRAND HAVEN, | | |
| Ownership of, change in..... | 234 | vii | Mich. | | |
| Work near, 1905..... | 91 A | xv | Iron furnaces at, record of..... | 339 | R C |
| Frood, Thomas | | | Fucus digitatus. | | |
| <i>See also</i> Frood nickel m. | | | Ottawa, near..... | 225 | x |
| Evidence by, before R. C. re:— | | | 32 B | xv | |
| gold, Neelon tp..... | 114 | R C | Fuels. | | |
| minerals, Lacloche mts..... | 59 | R C | <i>See also</i> Coal, Oil, Peat, Trees, etc. | | |
| mining laws..... | 307 | R C | Calorific power of, table of various. | 186 | i |
| tariffs..... | 231 | R C | 481 | R C | |
| Wallace iron mine..... | 142 | R C | Coal, peat and wood compared. | 200, 201 | ii |
| Iron ore shewn by, at World's | | | Composition of..... | 184 | i |
| Fair..... | 81 | ii | Definition and nature of..... | 185 | i |
| Owner, Wallace iron mine..... | 63 | ii | For brick-burning, notes by | | |
| (or No. 3) nickel mine, Mc- | | | Baker..... | 53, 51 B | xv |
| KIM TP., SUDBURY DIST. | | | For smelting. <i>See</i> Smelting. | | |
| Accidents in..... | 44, 45 | xii | Ontario, supply of..... | 203, 204 | ii |
| Bought by Ritchie..... | 169 c | xiv | Fuerst Bros. | 122 | xi |
| Flux from, for Creighton mine | 138 c | xiv | Fuller, Frank | 132 | x |
| Geology of..... | 263-268 | xii | 292 | xi | |
| Map of..... | At end of | xii | Dr. George A. | 505 | R C |
| Minor ref..... | 433 | R C | Fullerton, George H. | 62 | ix |
| 57, 285 | xii | | Fundamental gneiss. | | |
| Notes on, 1901..... | 278 | xi | Definition of..... | 194 | v |
| 1902..... | 119, 120 | xii | Fur-bearing animals. | | |
| Ore deposits of, character..... | 278 | xii | <i>See also</i> the different species. | | |
| Production of..... | 150 c | xiv | Abitibi dist..... | 193 | viii |
| Railway to..... | 136 c | xiv | 189 | xii | |
| Rocks in and near:— | | | 127 A | xiii | |
| greywacké..... | 89 c | xiv | 242 A | xiv | |
| nickel-bearing..... | 13 c | xiv | Hudson and James bays..... | 133 | iv |
| off-set deposits..... | 114 c | xiv | Mattagami valley..... | 131 A | xv |
| notes by Coleman..... | 57, 58 c | xiv | Moose River basin..... | 178 A | xiii |
| quartzite..... | 92 c | xiv | Niven's base line, Alg., and S. of. | 142 | ix |
| petrographical notes. | | | Timagami Lake dist..... | 58 | R C |
| 290, 291, 297 | xii | | | | |
| Sulphides in, percentage of..... | 151 c | xiv | | | |

| | Page. | Vol. | | Page. | Vol. |
|---|--------------|------|---|----------|------|
| Furlonge lake, MANITOU LAKE DIST., | | | Galbraith, John | | |
| R. R. D. | | | Evidence by, before R. C. | 425 | R C |
| Minor ref. to. | 49, 62 | iv | Minor refs. to. | 215 | i |
| Rocks on. | 78, 80 | iv | | 58 | x |
| Shores of, wooded. | 43 | iv | William | | |
| Furnace Falls. See Lyndhurst. | | | R. f. to surveys by, Timiskaming | | |
| Iron Co. | | | dist. | 37 A | xvi |
| Capital and date of charter. | 9 | vii | William (MINER) | 31 | ix |
| Furnaces. | | | tp., ALG. | | |
| See also Blast furnaces, etc. | | | Gold in. | 92 | i |
| Lime for lining of. | 6 B | xiii | See also Ophir gold mine | | |
| Reverberatory, compared with | | | Gale, James William | 249 | vi |
| blast. | 375 | R C | | 43, 50 | viii |
| Fusibility. | | | | 16 | xii |
| Scale of. | 449 | R C | Galena (SULPHIDE OF LEAD). | | |
| <i>Fusus tornatus.</i> | | | A sociation of, with gold. | 38 | iv |
| James bay. | 143 A | xiii | sulphur. | 22 A | xvi |
| G | | | Definition of. | 534 | R C |
| 16-22 gold locs., NEAR MUD | | | Determination of. | 204, 208 | vi |
| LAKE, R. R. D. | 68 A | xiii | Hardness of. | 202 | vi |
| 19 gold loc. See Imperial mine. | | | Hints on, to prospectors. | 460, 461 | R C |
| 61 gold loc, N. OF BAD VER- | | | Occurrences of. See Lead. | | |
| MILION LAKE, R. R. D. | 82 | vi | Plant for treating, Kingston. | 234 | vii |
| 69 gold loc. See Olive mine. | | | Price of, 1895. | 208 | vi |
| 149 gold loc. See Sairey Gamp | | | Specific gravity of. | 202 | vi |
| mine. | | | Gold Mining Co. | | |
| 151 gold loc. See Orion mine. | | | Capital and date of charter. | 10 | ix |
| Gabbro. | | | <i>Galeoscoptes carolinensis.</i> See Cat-bird. | | |
| Abitibi dist., petrography. | 140 A | xiii | Galesburgh, ILLINOIS, U. S. | | |
| | 210 A | xiv | Bricks from, tests on. | 130 | iii |
| Cobalt dist., description. | 41 B | xiv | Galicia. | | |
| notes. | 48-51 B | xiv | Oil in. | 115 | i |
| Cross l., Coleman tp., | | | | 93 A | xiv |
| analysis. | 51 B | xiv | <i>Galium asprellum.</i> | | |
| Definition of. | 534 | R C | Abitibi Lake dist. | 241 | xiv |
| Foley tp., petrography. | 180 | ix | “ boreale. | | |
| Hinchinbrooke tp., notes by | | | Mattagami valley. | 150 A | xv |
| Miller. | 228, 229 | viii | “ trifidum. | | |
| Loring (near), petrography. | 182 | ix | Abitibi Lake dist. | 241 A | xiv |
| Massagamashine lake, with | | | Mattagami valley. | 150 A | xv |
| hypersthene. | 296 | xii | “ var. latifolium. | | |
| Notes on, by Miller. | 234 | vi | Mattagami valley. | 151 A | xv |
| Port Coldwell (near), notes by | | | “ var. pusillum. | | |
| Coleman. | 212 | xi | Mattagami valley. | 151 A | xv |
| petrography. | 148 B | vii | “ triflorum. | | |
| Rainy Lake dist., notes by Cole- | | | Abitibi Lake dist. | 241 A | xiv |
| man. | 49 | iv | Mattagami valley. | 150 A | xv |
| petrography. | 91-93 | iv | Gall louse. | | |
| Sudbury dist. 240, 257, 268, 272, 295 | | xii | Abitibi dist. | 128 A | xiii |
| notes and photos. | 75-78, 122 C | xiv | Gallagher, Joshua | | |
| petrography. | 78 | i | Evidence by, before R. C. | 138 | R C |
| Timagami dist. | 164 | x | Iron Mg. Co. | | |
| Gaddes, T. | | | Capital and date of charter. | 28 A | xvi |
| Gold mining by, near Jackfish. | 266 | vi | Gallfingertown, OSNABRUCK TP., STOR- | | |
| <i>Gadus callarius.</i> See Cod. | | | MONT CO. | | |
| Gaebel, William | 107 A | xv | Marine deposits at. | 220 | x |
| Gagne, Israel | | | Galluccio, Bartolomeo | 31, 32 A | xv |
| Ontario, Ltd., g. m. formed by. | 53 | vii | Galt, A. T. | 21 | ii |
| Owner, Wendigo g. m. | 71 | x | John | 49, 57 | vi |
| Island Gold Mine Co. | | | Galt, N. DUMFRIES TP., WATERLOO CO. | | |
| Capital and date of charter. | 9 | vii | Guelph formation near. | 115 B | xiii |
| Gahnite. | | | Galway tp., PETERBORO CO. | | |
| Raglan tp. | 198 | ix | Allanite in. | 193 | ix |
| Gainsborough tp., LINCOLN CO. | | | Barite in. | 195 | ix |
| Iron ore from, exhibited at | | | Calcite in. | 195 | ix |
| World's Fair. | 81 | ii | Galena in. | 198 | ix |
| Galaso, Araso | 45, 48 | xii | Gold in. | 199 | ix |
| “Galatea” s.s. | 38 A | xiv | Grenville series in. | 56 B | xiii |

| | Page. | Vol. | | Page. | Vol. |
|--|----------|--------|--|----------|-----------|
| Galway tp., PETERBORO CO.—<i>Con.</i> | | | Ganley harbour, L. SUPERIOR. | | |
| Iron ore in, analysis..... | 131 | R C | Description of shores near..... | 135 | viii |
| magnetite, analysis..... | 202 | ix | High hills north of..... | 281 | A xiv |
| Lollingite in, analysis..... | 201 | ix | Uninhabited country near..... | 147 | viii |
| Marble in..... | 83 | R C | Ganley's iron claim, NOISY RIVER, | | |
| Pyrrhotite in..... | 207 | ix | L. SUPERIOR. | | |
| | 200 | A xvi | Iron formation on..... | 204 | A xv |
| lead mine, PETERBORO CO. | | | Ganong, W. K. | 134 | xii |
| Calcite in..... | 196 | ix | | 52, 53 | A xiii |
| Melanterite in..... | 203 | ix | Gans, Jochim | | |
| Mining Co. | | | Inventor of a copper-smelting | | |
| Capital and date of charter..... | 9 | vii | process..... | 374 | R C |
| Game. | | | Gap nickel mine. See Lancaster | | |
| Abitibi dist..... | 193 | viii | Gap mine. | | |
| | 127 | A xiii | Garafala, Antonio | 46, 50 | x |
| | 253 | A xiv | Garafraxa E. tp., DUFFERIN CO. | | |
| Blanche River reg..... | 224 | xi | Clay and marl in, analyses..... | 16 | x |
| | 188 | xii | Garcia Gold Mining Co. | | |
| Hinterland, The..... | 133 | iv | Capital and date of charter..... | 9 | vii |
| L. of the Woods..... | 120 | vii | Garden island, OFF KINGSTON. | | |
| Mattagami valley..... | 131 | A xv | Black River formation on..... | 44 | B xiii |
| Michipicoten div..... | 297 | A xiv | River. ALG. | | |
| | 200 | A xv | Beaches at, height of..... | 152, 155 | viii |
| Mississagi River dist..... | 172 | xii | See also below. Gravel. | | |
| Moose River basin..... | 178 | A xiii | Cascade silver mill at, photo..... | 136, 137 | viii |
| Nipigon Lake dist..... | 139 | A xvi | Galena near..... | 175 | i |
| Niven's base line and S. of..... | 142 | ix | Gravel (economic) near..... | 197 | viii |
| Rainy Lake dist..... | 97 | iv | photo of steam-shovel at..... | 136, 137 | viii |
| Timagami dist..... | 161 | x | Notes on and vicinity, by Cole- | | |
| Gamgee, John | | | man..... | 122, 123 | viii |
| Letter from, to Ritchie..... | 173, 174 | C xiv | Rocks at and near..... | 161, 163 | viii |
| Nickel steel made by..... | 165 | C xiv | | 274, 275 | A xiv |
| notes by Ritchie..... | 167-170 | C xiv | greywacké conglomerate..... | 159 | viii |
| Gamm, H. E. | 39, 79 | A xiv | limestone..... | 124 | viii |
| Gamsby, C. H. | | | quarrying..... | 31 | B xiii |
| Crops reported by, Groundhog | | | limestone..... | 160 | viii |
| lake..... | 114 | iv | marble..... | 229 | R C |
| Ref. to surveys by, Mattagami | | | Victoria mine, at, photo..... | 136, 137 | viii |
| dist..... | 115 | iv | river, LAKE GEORGE, ALG. | | |
| Gananoque, LEEDS TP., LEEDS CO. | | | See also Garden River. | | |
| Beach at..... | 221 | x | Antimony on..... | 30 | R C |
| | 241 | A xiii | Beaches on..... | 123 | viii |
| Brick-yard at, notes on..... | 76 | B xv | Galena on..... | 198 | ix |
| Granite quarries near..... | 296, 297 | xi | argentiferous..... | 67, 203 | R C |
| Mica mining near..... | 28 | xi | mining..... | 29 | R C |
| works at..... | 292 | xi | | 145, 147 | R C |
| Serpentine mining near..... | 297 | xi | Marble on, notes by Merritt..... | 76 | R C |
| | 13 | A xiii | Selwyn..... | 68 | R C |
| falls, GANANOQUE RIVER. | | | Snow..... | 83 | R C |
| Blast furnace at, 1800..... | 13 | ii | Stibnite near..... | 210 | ix |
| gold mine, NEAR MICHIPICOTEN, ALG. | | | Gardiner, "Doc." | 82 | vi |
| Notes on, 1898..... | 101 | viii | Frank | | |
| 1899..... | 114 | ix | Gold-mining by, L. of the Woods. | 12 | ix |
| 1900..... | 139 | x | Michipicoten | | |
| Gold Mining Co. | | | div..... | 103 | vii |
| Capital and date of charter..... | 10 | ix | Minor ref. to..... | 238 | v |
| Licence to..... | 116 | ix | Gargantua cape, L. SUPERIOR. | | |
| Work-by, 1899..... | 114 | ix | Amygdaloidal trap near..... | 204 | vii |
| river, LEEDS CO. | | | | 168 | viii |
| Blast furnace on..... | 319 | R C | containing copper..... | 205 | vii |
| | 13 | ii | Beaches at and near..... | 153 | viii |
| Waterpower on, for mica mining. | 292 | xi | height..... | 155 | viii |
| Ganley, James, Joseph AND T. | | | Granite locations at..... | 67 | iii |
| Mining by, Michipicoten div..... | 103 | vii | Photo. of..... | 80, 81 | xii |
| | 103 | viii | Thompsonite at..... | 211 | ix |
| | 116 | ix | Rocks at..... | 7 | Bull. iii |
| | 141 | x | Nipigon series..... | 9, 11 | Bull. iii |
| | 66 | xii | harbour, L. SUPERIOR. | | |
| | 48 | xiii | Description of, by Coleman..... | 132 | viii |

| | Page. | Vol. | | Page. | Vol. |
|--|---------|------|--|----------------|------|
| Gargantua river, L. SUPERIOR. | | | Garr, William | 58 | xii |
| Description of shores north and south of | 132 | viii | Garrett, A. | 178 | R C |
| Garland, Capt. M. N. | | | Garrison, A. | 119 | ii |
| Analysis of iron ore from mine of. | 75 | ii | Garrow tp., NIP. | | |
| Nicholas | | | Chalcopyrite in | 196 | ix |
| Gypsum mining by, Oneida tp. | 113 | i | "Garry Owen," s.s. | 202 | i |
| 253 | ii | | Garry river, DELISLE RIVER, GLEN- | | |
| 199 | iii | | GARRY CO. | | |
| 282 | v | | Log of well on | 46 B | xiii |
| 23 | x | | Garson lake, GARSON TP., NIP. | | |
| (See also Garland gypsum mine.) | | | Conglomerate near | 94 C | xiv |
| Garland gypsum mine, ONEIDA TP., | | | nickel mine, GARSON TP., NIP. | | |
| HALDAMAND CO. | | | Notes on, 1906 | 67 A | xvi |
| Idle, 1897 | 100 | vii | tp., SUDBURY DIST., NIP. | | |
| Notes on, by L. J. Johnston | 122 | R C | Agricultural land in | 106 C | xiv |
| 1891 | 243 | i | Beaches in | 103, 106 C | xiv |
| 1892 | 253 | ii | Copper mining in | 19 | viii |
| 1893 | 199 | iii | Gravel and sand plains in | 273 | xii |
| 1894 | 252 | iv | 203 A | xiii | |
| 1895 | 282 | v | 74 C | xiv | |
| Garlick, E. C. | | | Nickel mining in | 39 A | xvi |
| Estimate by, of cost of charcoal- | | | <i>See also</i> Cryderman mine. | | |
| making, Ohio | 337 | R C | Garson mine. | | |
| Paper by, on the Henderson | | | Kirwood mine. | | |
| steel converter | 488-492 | R C | Victoria mines. | | |
| ref. to | xiii | R C | prospecting, by Mond Co. | 66 A | xv |
| R. M. | 103 | viii | Rocks in, greenstone | 75 | i |
| Garnet. | | | nickel-bearing | 60-62 C | xiv |
| <i>See also</i> Andradite and Melanite. | | | norite | 242 | xii |
| Apatite dists. | 422 | R C | quartzite | 92, 128 C | xiv |
| Craigmont | 43 A | xv | Garter snake. | | |
| Determination of | 205 | vi | Abitibi dist. | 127 A | xiii |
| Elmsdale, near | 172 | ix | McCann tp., Nip. | 253 A | xiv |
| Frederick House river | 178 | viii | Gas. | | |
| French River dist. | 67 | i | For Natural gas. <i>See</i> Natural gas. | | |
| Hardness of | 202 | vi | Lime used in manufacture of | 3, 5 B | xiii |
| Mattagami river | 180 A | xvi | Peat for, analysis | 230 | xii |
| Notes on, by Goodwin | 228 | vi | plant, cost | 231 | xii |
| Occurrences of | 198 | ix | diagrams | 109 | xi |
| Radcliffe tp. | 224 | viii | notes | 209, 210 | i |
| Raglan tp. | 211 | vii | paper | 228-233 | xii |
| 222 | viii | | Saw-dust produces, for smelting. | | |
| Rainy lake | 82 | iv | 390, 393, 483 | R C | |
| Robert bay | 81 B | xiii | Gas and Oil Co. OF SPRINGVALE. | | |
| Specific gravity of | 202 | vi | Capital and date of charter | 25 A | xv |
| Sturgeon l., R. R. d. and Th. B. d. | 173 | vii | Gash pt., RAINY LAKE, R. R. D. | | |
| Value of (in Ont.), doubtful | 188 | ii | Rocks at, quartz-diorite | 78 | iv |
| Garnier, Jules | | | Gasoline. | | |
| Data by re tests on nickel-steel .. | 145 | ii | As a by-product of petroleum. | | |
| Method of, for separating Sud- | | | 158, 163 | R C | |
| bury ores | 156 | ii | Gaspe co. | | |
| treating garnierite. | 151 | ii | Devonian rocks of | 46 | R C |
| New Caledonia nickel deposits | | | Oil in | 196 | ii |
| discovered by | 213 | ix | pt., GASPÉ CO., QUE. | | |
| 3, 147, 149 C | xiv | | Appalachian system from, to | | |
| Smelting efforts of, New Caledo- | | | Tennessee | 95 A | xiv |
| nia nickel ores | 215 | ix | Gasse, Louis | | |
| Sudbury ores reported on, by ... | 3 C | xiv | Gold mining by, Maniton lake .. | 85, 87 | vi |
| Garnierite OR Noumeite. | | | Paul | | |
| Description of | 149 | ii | Gold mining by, Maniton lake .. | 85 vi; 123 vii | |
| Hardness of | 201 | vi | Manager, Sairey Gamp mine | 100 | x |
| New Caledonia | 193 | ii | <i>Gasteropoda.</i> | | |
| analyses | 148 C | xiv | Abitibi river | 188, 189 | viii |
| Notes on, by Goodwin | 214 | vi | Kwataboahagan river, notes by | | |
| Origin of | 150 C | xiv | Parks | 186 A | xiii |
| Specific gravity of | 201 | vi | <i>Gasterosteus aculeatus.</i> | | |
| Treatment of notes by Levat. | 151-153 | ii | Greens creek | 224 | x |
| | | | Gatensbury, E. | 97 | x |
| | | | Gates, W. S. | 67 A | xvi |

| | Page. | Vol. |
|---|----------|------|
| Gates Ajar Narrows, PIPESTONE | | |
| LAKE, R. R. D..... | 61 | iv |
| Gate's crusher. | | |
| For cement making | 132 A | xiv |
| Gatling gold mine, MARMORA TP., | | |
| HASTINGS CO. | | |
| Assays of ore from..... | 28, | R C |
| Chlorination works at..... | 107 | R C |
| Included in Deloro g. m..... | 60 | vi |
| See also Deloro g. m. | | |
| Minor ref. to | 68 | R C |
| Mispickel in..... | 38 | iv |
| auriferous, photo..... | 112, 113 | xi |
| Notes on, by D. E. K. Stewart.. | 110 | R C |
| Operating, 1892..... | 238 | ii |
| Section of | 107 | R C |
| Five Acres. See Atlas Arsenic | | |
| Co. | | |
| Gaudaur—? | 40 | vii |
| Gaudette, C. | 103 | viii |
| | 116 | ix |
| Gaudette tp., ALG. | | |
| Copper mining in. See Superior | | |
| copper mine. | | |
| Gautheria procumbens. | | |
| Abitibi Lake dist..... | 241 A | xiv |
| Gautier, F. | | |
| Notes by, on iron smelting..... | 475 | R C |
| Gavin, Joseph E. | 93 | xii |
| Gawley, Andrew See Gawley | | |
| property. | | |
| gold mine, MARMORA TP., | | |
| HASTINGS CO. | | |
| Gold and arsenic values in..... | 104 | xi |
| Minor ref. to | 197 | xi |
| Notes on, by Miller..... | 198 | xi |
| property, MARMORA TP., | | |
| HASTINGS CO. | | |
| Gold and arsenic values of..... | 104 | xi |
| Gaylord, E. W. | 234 | ii |
| | 29, 30 | iii |
| Gay-Lussac. | | |
| Experiments by, on lime-burning. | 9 B | xiii |
| Tower of, for pyrites ores, | | |
| description | 194 A | xvi |
| Gaylussacia resinosa. | | |
| Mattagami valley | 150 A | xv |
| Ottawa (near) | 225 | x |
| Geary, Sir Henry Le Guay | 143 | ii |
| Gebo (INDIAN) | 198 | vii |
| Geese. | | |
| Caribou island, L. Superior..... | 111 | v |
| Hinterland, The..... | 133 | iv |
| Geikie, Sir Alex. | 209 | vii |
| Archibald | | |
| Views of, re metalliferous veins. | 172 | i |
| James | | |
| Description by, of till | 105 | i |
| "Geisha," s.s. | 248 A | xiv |
| Gellivare, SWEDISH LAPLAND. | | |
| Iron ore of..... | 472, 473 | R C |
| Wenstrom separator used at.... | 328 | xii |
| Gem stones. See Precious stones. | | |
| Gemmell, L. J. | 103 | vii |
| | 116 | ix |
| | 141 | x |
| | 74 | xi |

Gemmell, L. L.

| | | |
|-----------------------------------|------|------|
| Blair and Bliss mica mines partly | | |
| owned by..... | 290 | xi |
| Cornudum found by, S. Sher- | | |
| brooke tp..... | 225 | viii |
| Gibson's mica mine worked by.. | 129 | xii |
| Manager, Donnelly mica mine.. | 130 | xii |
| Mica producing, 1903..... | 12 A | xiii |

Gemmell, D. W.

| | | |
|-------|-----|-----|
| ..... | 141 | x |
| | 66 | xii |

General Chemical Co.

| | | |
|--------------------------------|-----|----|
| Working pyrites in Madoc tp. . | 295 | xi |
|--------------------------------|-----|----|

General Electric Co.

| | | |
|-----------------------------------|----------------|----------------|
| See also Loughborough Mg. Co. | | |
| Boring plant purchased by..... | 42 A | xiii |
| Byrnes mica mine..... | 129 | xii |
| Effect on, of depression in elec- | | |
| trical business..... | 83 A | xiv |
| Hanlan mica mine owned by.... | 129 | xii |
| | 12 A | xiii |
| Lacey mica mine owned by..... | 134 | x |
| | 287 | xi |
| | 27 | xii |
| | 12 A | xiii |
| Mica mining by, 1903..... | 91, 92 A | xiii |
| | 20, 84, 85 A | xiv |
| | 1905..... | 21, 102, 103 A |
| | 1906 | 22, 23 A |
| | Gould lake.... | 287 |
| | | xi |

properties of, transferred to

| | | |
|-----------------------|-------|-----|
| Loughboro Mg. Co..... | 86 A | xvi |
| works of | 105 A | xv |
| Ottawa | 86 A | xiv |
| | 105 A | xv |
| | 91 A | xvi |
| Sydenham | 291 | xi |
| transferred to | | |
| Ottawa | 132 | xii |
| Mining class at | 39 A | xv |

Genesee slates.

| | | |
|------------------------------|------|-----|
| Composition of | 99 A | xiv |
| Kettle pt., L. Superior..... | 156 | xii |
| Ohio | 141 | i |

Genesis, Book of

| | | |
|----------------------|-----|-----|
| Quotation from | 107 | iii |
|----------------------|-----|-----|

Geneva lake, HESS TP., ALG.

| | | |
|-----------------------------------|-------|------|
| Beach on, altitude..... | 211 | x |
| | 103 c | xiv |
| Glacial striae on, direction..... | 211 | x |
| Gravel plain near..... | 106 c | xiv |
| Iron ore on | 187 | x |
| Rocks on and near..... | 82 | i |
| | 154 | x |
| | 222 A | xiii |
| Clay slates..... | 73 | i |
| limestone, crystalline..... | 107 | xii |
| for burning | 94 | i |
| notes..... | 29 B | xiii |

Geneva Lake station, HESS TP.,

| | | |
|-------------------------------|------|------|
| ALG. | | |
| Limestone from, analysis..... | 307 | xii |
| | 29 B | xiii |

Genth, Prof. F. A.

| | | |
|----------------------------------|-----|----|
| Ref. to paper by, on minerals of | | |
| N. Carolina..... | 120 | ix |

| | Page. | Vol. | | Page. | Vol. |
|--|---------------|--------|--|----------|--------|
| Genthite, (Nickel-gymnrite) | | | Georgi, J. | 103 | viii |
| Composition of..... | 445 | R C | | 116 | ix |
| Michipicoten island..... | 193, 194 | ii | | 141 | x |
| | 205 | ix | | 74 | xi |
| | 150 C | xiv | | 66 | xii |
| Oregon and N. Carolina..... | 148 C | xiv | Georgia, U. S. | | |
| Geological formations. | | | Corundum in..... | 62 | vi |
| Animikie iron range..... | 158 | A XV | | 213 | vii |
| Clays (Pleistocene and Recent)... | 6 | B XV | notes..... | 19 | ix |
| Michipicoten div..... | 174 | A XV | Platinum in..... | 142 | vii |
| Nipigon Lake dist..... | 139 | A XVI | Georgian bay, L. HURON. | | |
| Ontario, divisions of..... | 22 | B XIII | Beaches on, notes by Coleman.. | 151 | viii |
| | 96 | A XIV | | 176, 177 | ix |
| Sudbury dist..... | 14 | C XIV | Building-stone on..... | 93 | i |
| Thunder bay, north of..... | 254 | A XIV | Copper ores on, notes by Cole- | | |
| Geological nomenclature. <i>See</i> | | | man..... | 164-168 | ix |
| Nomenclature, geological | | | Forest fires in, 1871..... | 206 | v |
| Geological survey. | | | Geology of, notes by Bell.... | 67, 68 | i |
| Value of a, to palaontology..... | 422 | R C | Lime on, for smelting..... | 2, 13 | B XIII |
| Geological Survey of Canada. | | | Rocks on, anorthosite..... | 181 | ix |
| Economic importance of Huron- | | | Medina..... | 43 | R C |
| ian recognized by..... | 249 | V | mineral-bearing.... | 65 | R C |
| Effort by, to push Canadian mica | | | Paleozoic..... | 22 | B XIII |
| in Gt. Britain..... | 28 | xi | Silurian..... | 24 | B XIII |
| Extract from reports by, on:— | | | Cambro-Silurian..... | 41-44 | R C |
| Madoc blast furnace..... | 22, 23 | ii | Sand from, for brick-making.... | 100 | B XV |
| Marmora iron foundry.... | 322-325 | R C | Smelter on, proposed..... | 261 | viii |
| Iron ores of Canada..... | 32 | ii | and Niagara Copper Mg. Co. | | |
| Saxicava sand..... | 32 | B XV | Work by, 1900..... | 121 | x |
| Formation of, ref. to..... | 21 | ix | Mining Co. | | |
| Maps of, excellent..... | 90 | vi | Mica mining by, Ferguson tp... | 279 | v |
| Museum of, character..... | 112 | R C | Portland Cement Co. | | |
| Leda Clay in, notes..... | 31 | B XV | Notes on, by De Kalb..... | 108, 109 | ix |
| Objects and early operations of. | 408 | R C | Subsequently the Imperial | | |
| Reports of, notes on..... | xiv | R C | Cement Co., <i>which see.</i> | | |
| Statistical work of, notes on. | 414, 415 | R C | "Georgina" s.s. | 188 | v |
| Great Britain. | | | Georgina tp., YORK CO. | | |
| Fruitless search for coal prevent- | | | Pyrites in; arsenic plant in. <i>See</i> | | |
| ed by..... | 409 | R C | Virginia. | | |
| Officers of..... | 493 | R C | Limestone in..... | 126 | B XIII |
| The United States. | | | <i>Geranium carolinianum.</i> | | |
| Notes on creation of..... | 408 | R C | Abitibi Lake dist..... | 242 | A XIV |
| Geologist. | | | Mattagami valley..... | 150 | A XV |
| Qualifications of..... | 410 | R C | Gerhauser, William | | |
| Geology. | | | Estimates by, of iron producing | | |
| Method of teaching, by Summer | | | in Mich..... | 338 | R C |
| Mining Classes..... | 281 | viii | Notes by, on iron making in | | |
| "Geology of Canada, 1863." | | | Detroit..... | 399 | R C |
| Extracts from, re:— | | | German Canadian Smelting and | | |
| Corundum in N. Burgess tp.... | 62 | vi | Refining Co. | | |
| | 214 | vii | Capital and date of charter..... | 29 | A XVI |
| Erie clay..... | 10 | B XV | silver. | | |
| Iron and iron mining..... | 30-38 | ii | Composition of..... | 164 | C XIV |
| Origin of marl..... | 119 | A XIV | Nickel in..... | 224 | ix |
| Peat as fuel for locomotives.... | 159 | i | tp., ALG. | | |
| Saugeen clay..... | 18 | B XV | Physical features of..... | 108, 109 | A XIII |
| George, Johann | 88 | B XIV | Soil in, character..... | 132 | A XIII |
| George, R. D. | | | Trees in..... | 125 | A XIII |
| Work by, 1898..... | 121, 135 | viii | Germantown, U. S. | | |
| George (Indian chief). | 118, 125, 164 | v | Brick pavement of..... | 109 | iii |
| George Heenan gold mine. <i>See</i> | | | Germany. | | |
| Heenan, George | | | <i>See also Prussia.</i> | | |
| island, GEORGIAN BAY, L. | | | Ammonium sulphate imported | | |
| HURON | 84, 93 | i | from..... | 169 | R C |
| lake, DOG RIVER, L. SUPERIOR. | | | Carbide of calcium produced in. | 36 | A XI |
| Rocks on..... | 141 | viii | used in, notes. 22.23 | x | |
| Huronian..... | 348 | A XIV | Cement industry in, over-produc- | 36 | xii |
| | | | tion..... | | |

| | Page. | Vol. | | Page. | Vol. |
|--|---------------|--------|---|----------------|--------|
| Germany.—Con. | | | Gertrude nickel mine.—Con. | | |
| Cement imports from, 1900..... | 15 | x | Notes on, 1899..... | 99 | ix |
| 1901..... | 33 | xi | 1900..... | 125 | x |
| 1902..... | 34 | xii | 1901..... | 64, 65, 281 | xi |
| Coal in..... | 175 | A xiii | 1902..... | 123, 246-248 | xii |
| Cobalt ores in..... | 103 | A xiii | Ore deposits of, character..... | 278 | xii |
| 61 | B xiv | | Photos of..... | 208, 209 | xi |
| imports, from New Cale- | | | Production of..... | 144 | C xiv |
| donia..... | 73 | B xiv | to 1902..... | 287 | xii |
| Copper smelting in, notes on..... | 375 | R C | Railway to..... | 136 | C xiv |
| Glass-making in, mixtures used. | 118, 119 | xi | Rocks in and near:— | | |
| Graphite industry in..... | 34, 36 | vi | faulting..... | 37 | C xiv |
| Iron and steel in:— | | | granite..... | 83, 116 | C xiv |
| cost of making..... | 396 | R C | granitoid-gneiss..... | 293 | xii |
| production, 1888..... | 224 | R C | hypersthene..... | 18 | C xiv |
| 1890 (Thomas | | | norite..... | 31, 32, 36, 81 | C xiv |
| steel)..... | 91 | ii | notes by Cole- | | |
| 1892..... | 122 | ii | man..... | 32, 33 | C xiv |
| Lithographic stone from, analy- | | | quartz-syenites..... | 297 | xii |
| sis..... | 181, 182 | ii | petrographical | | |
| Mining in, compared to U. S. | | | notes..... | 112, 116 | C xiv |
| mining..... | 509 | R C | Smelter at, blown in..... | 19 | xii |
| Mining lands in, ownership..... | 18, 22 | i | plan..... | 247 | xii |
| sale of..... | 260 | R C | Work at, 1901..... | 20, 21 | xi |
| laws of..... | 296, 297, 318 | R C | by L. Superior Power | | |
| schools in..... | 495-497 | R C | Co..... | 143 | C xiv |
| Nickel coinage in..... | 161 | ii | resumed, 1905..... | 12 | A xv |
| 182..... | iv | | suspended, 1903..... | 87 | A xiii |
| 164 | C xiv | | Gertwood, Dr. | 146 | R C |
| composition..... | 184 | iv | Gesic zinc mine, NEAR ROSSPORT, | | |
| ores of..... | 146 | C xiv | Tn. B. D. | | |
| plating in, process..... | 158 | ii | Notes on, 1899..... | 87 | ix |
| Peat industry in:— | | | Gessage, William | | |
| drying process..... | 196 | i | Process of, for refining nickel ores..... | 220 | ix |
| milling-machines..... | 199 | xii | Gessner, —? | 118 | xi |
| 20 | A xiii | | Getzville, ERIE CO., N. Y. | | |
| moss-litter..... | 187, 191 | vi | Boring in, for gas..... | 162 | i |
| preparation..... | 141-143 | iii | <i>Gum ricale.</i> | | |
| production..... | 144 | iii | Abitibi dist..... | 241 | A xiv |
| notes on..... | 212, 213 | ii | " Mattagami valley..... | 150 | A xv |
| wages in..... | 195 | ii | " <i>stratum.</i> | | |
| Sand-lime brick industry in..... | vi | B xiii | Abitibi dist..... | 241 | A xiv |
| " Mattagami valley..... | | | " Mattagami valley..... | 151 | A xv |
| " <i>triflorum.</i> | | | Abitibi dist..... | 241 | A xiv |
| Gersdorffite (Nickel glance.) | | | Giant Gold Co. | | |
| Description of..... | 213 | vi | Capital and date of charter..... | 8 | xii |
| Hardness and specific gravity of..... | 202 | vi | <i>See also</i> next ref. | | |
| Sudbury dist..... | 198 | ix | gold mine, MOSHER BAY, ANZ- | | |
| 58 | xii | | HEKUMMING LAKE, R. R. D. | | |
| Denison tp., analysis..... | 233 | i | Notes on, 1902..... | 92 | xii |
| Gersdorffite mine..... | 192 | ii | 1903..... | 67 | A xiii |
| Macdonnell mine..... | 180 | ii | 1904..... | 53 | A xiv |
| Notes and analysis..... | 160 | C xiv | Silver Nugget Mines, Ltd. | | |
| Worthington mine..... | 282 | xii | Capital and date of charter..... | 28 | A xvi |
| 31 | C xiv | | Giants Causeway, ULSTER, IRELAND. | | |
| Gersdorffite nickel mine, NEAR | | | Basalt rocks of..... | 529 | R C |
| WORTHINGTON, SUDBURY DIST. | | | Tomb island, GEORGIAN BAY, | | |
| Gersdorffite in..... | 192 | ii | L. HERON. | | |
| 160 | C xiv | | Limestone on..... | 109 | B xiii |
| Morenosite in..... | 163 | C xiv | Gibb, Thomas | | |
| Nicolite in..... | 192 | ii | Notes by, on Mond nickel process..... | 120 | viii |
| Gertrude nickel mine, CREIGHTON | | | Gibbard, William | | |
| TP., SUDBURY DIST. | | | Notes by, on copper mine at Point | | |
| Blueite in..... | 166 | C xiv | aux Mines..... | 208 | A |
| analysis..... | 282 | xii | Gibbon, William S. | | |
| Boring plant purchased by..... | 42 | A xiii | Evidence by, before R. C.:— | | |
| Copper in, percentage..... | 152 | C xiv | limestone, Manitoulin island..... | 81 | R C |
| scarcity of..... | 62 | x | oil, Manitoulin island..... | 167 | R C |
| 15 | C xiv | | taxing mining lands..... | 307 | R C |

| | Page. | Vol. | | Page. | Vol. |
|---|--------|------|---|--------|------|
| Gibbons, George C. | 50 | xii | Gibson, Thomas William—Cm. | | |
| William | | | Papers and reports by, on: | | |
| Gold mining by, L. of the Woods, 118 | R C | | 1896. Moss litter.....185-192 | vi | |
| 233 | ii | | 1897. Water Powers of Ontario, 251-256 | vii | |
| Gibbs, F. N. | | | Report by, as Deputy Minister of | | |
| Exhibit of, at Pan-American | | | Mines, 1906.....3-48 | A xvi | |
| exhibition.....86 | xi | | Reports by, as Director: | | |
| Director, Consolidated Mines Co. | | | 1900.....1-60 | x | |
| of L. Superior.....257 | xi | | 1901.....3-60 | xi | |
| Harold Lake gold mine owned | | | 1902.....1-52 | xii | |
| and managed by.....4 Bull. | i | | 1903.....1-45 | A xiii | |
| 146-148 | v | | 1904.....1-36 | A xiv | |
| 79 | vi | | 1905.....1-38 | A xv | |
| Manager, Porcupine silver mine. 258 | xi | | Work by, 1894.....4 | v | |
| Gibraltar Mining and Develop- | | | W. K. | | |
| ment Co. | | | Oil well drilled by, Petrolea field, 25, 26 | v | |
| Capital and date of charter.....8 | vii | | William | | |
| rock , MANITOULIN ISLAND, ALG. | | | Quarry of, at Crookston.....98, 99 | vii | |
| Clinton formation at.....78 | B xiii | | 48 | viii | |
| Gibson, A. | | | in Clinton tp.....97 | i | |
| <i>See also</i> Gibson mica mine. | | | 74 | B xiii | |
| Manager, Levett and Davis mica | | | Shareholder, Willson Carbide Co. 22 | x | |
| mine.....194 | iii | | lake , VERMILION RIVER, NIP. | | |
| Alexander L. | | | Gold washing on.....257, 258 | vii | |
| Notes by, on peat in Greenlaw, | | | mica mine , N. ELMSLEY TP., | | |
| Scotland.....187 | i | | LANARK CO. | | |
| Angus | | | Abandoned, 1902.....129 | xi | |
| Cobalt and nickel reported by, | | | Notes on, 1901.....290, 291 | xi | |
| Michipicoten div.....205 | A xv | | Gieseckite. <i>See</i> Agalmatolite. | | |
| Manxman gold mine managed by, 64, 80 | xii | | Giessen, E......132 | vii | |
| 47 | A xiii | | 92 | viii | |
| 238 | xi | | Gifford, J. R......61, 62, 276 | viii | |
| owned by...141 | x | | Gifhorn, HANOVER, GERMANY. | | |
| Mining by, Michipicoten div....74 | xi | | Peat at.....213 | ii | |
| 66 | xii | | moss-litter.....187 | vi | |
| 48 | A xiii | | Gilbert, F. L......141 | x | |
| Dr......54 | xi | | G. K. | | |
| James.....101 | x | | Altitudes of Iroquois beach given | | |
| Hon. John M. | | | by.....232 | A xiii | |
| Transmittal letters to and from...3-6 | vi | | Ref. to report by, on Great Lakes. 226 | x | |
| v.....vii | vii | | work by, on Henry mts, | | |
| T......141 | x | | of Col.....156-158 | vii | |
| Thomas William | | | Views of, on Iroquois beach ....226 | A xiii | |
| Appointed to Bureau of Mines...3 | i | | J......106 | x | |
| Directorship.....5 | x | | portage , NETTOGAMI RIVER, | | |
| Correspondence between, and | | | ALG.....137 | A xiii | |
| Miller <i>re</i> Cobalt, Ont.....10, 11 | B xiv | | Gilchrist, F. W......29, 37 | ix | |
| Niccolite in Cobalt dist. re- | | | James.....68 | vi | |
| cognized by.....96 | A xiii | | Gildersleeve, H. H. | | |
| Notes by, on new Mining regu- | | | Mica mining by, Storrington tp..133 | x | |
| lations.....214, 215 | iv | | Giles, W. A......119 | ii | |
| Papers and reports by, on: | | | Gill, A. C......171 | xii | |
| 1891. Artesian wells.....49-62 | i | | Alexander | | |
| Peat, its use and value | | | Notes by, on early production of | | |
| for fuel.....180-211 | i | | gypsum in Ont.....121 | R e | |
| Technical Instruction 212-217 | i | | <i>See also</i> next ref. | | |
| 1892. Peat as a Fuel.....203-208 | ii | | Allan and Brown. | | |
| 1893. Mining Accidents.....167-177 | iii | | Gypsum quarrying by.....111, 114 | i | |
| Vitrified brick for pave- | | | William | | |
| ments.....103-132 | iii | | Evidence by, <i>re</i> royalties in Spain. 30 | i | |
| 1894. Hinterland of Ontario, | | | P. O. , N. CAYUGA TP., HALDI- | | |
| The.....101, 138 | iv | | MAND CO. | | |
| ref. to.....5 | iv | | Sandstone quarry at.....56 | B xiii | |
| Mining Accidents...199-215 | iv | | Gillan spring , FITZROY TP., CARLE- | | |
| 1895. Mining Accidents...235-240 | v | | TON CO. | | |
| Work with the Diamond | | | Water from, analysis.....205 | ix | |
| Drill.....221-234 | v | | | | |

| | Page. | Vol. | | Page. | Vol. |
|-------------------------------------|----------|--------|---|---------------|-----------|
| <i>Gillenia trifoliata</i> . | | | Glacial striae. — <i>Con.</i> | | |
| Mattagami valley..... | 150 | A xv | Lakes Superior and Huron, N. of. | 157 | viii |
| Gillespie, H. | 16 | x | Mica bay..... | 173 | ii |
| P. | | | Mattagami valley..... | 135 | A xv |
| Paper by, on Cement Industry of | | | Michipicoten div..... | 185 | xi |
| Ontario..... | 118-183 | A xiv | Dog lake..... | 197 | vii |
| Report by, on samples of cement | | | river..... | 288 | A xiv |
| from Lakefield..... | 19 | A xv | Magpie lake..... | 199 | vii |
| Robert | 21 | ii | Wawa (near)..... | 194 | vii |
| nickel mine. See Trillabelle | | | Mississagi river..... | 165, 167 | xii |
| nickel mine. | | | Night-hawk lake..... | 107 | A xiii |
| Gillies, H. | 103 | vii | river..... | 175 | viii |
| J. A. | 103 | vii | Parry Sound dist..... | 178, 179 | ix |
| Bros., Ltd. | 46 | A xvi | Photo of example of..... | 4 | B xv |
| Depot, MONTREAL RIVER, NIP. | | | Porcupine lake..... | 106 | A xiii |
| Mining class at..... | | | Rainy River dist..... | 88 | v |
| Silver Mg. Co. | | | Sebastopol tp..... | 224 | viii |
| Capital and date of charter..... | 29 | A xvi | Sudbury dist..... | 101 | C xiv |
| tp., TH B. D. | | | Thunder Bay dist..... | 89 | v |
| Silver mining in..... | 23 | viii | | 178, 179 | ix |
| See also Silver Creek mine. | | | Mackay mt. | 133 | vii |
| Witherite in..... | 212 | ix | Nipigon Lake dist..... | 135 | A xvi |
| Gilman, E. W. | 52 | ix | Timagami dist..... | 178, 179 | ix |
| Gilmore, D. B. | 103 | viii | Glaciation. | | |
| | 116 | ix | Abitibi dist..... | 185 | A xiv |
| S. M. | 103 | vii | Algoma-Nipissing boundary line. | | |
| | 103 | viii | | 181-183 | vi |
| | 116 | ix | Effect of, on iron deposits N. of | | |
| W. | 103 | viii | L. Superior..... | 25, 143 | xi |
| | 116 | ix | Hudson river, N. Y..... | 32 | B xv |
| William | | | Labrador, effect of, on gneisses.. | 15 | R C |
| Brickyard of, Whithy..... | 88 | B xv | Lake of the Woods..... | 7 | Bull. iii |
| Gilpin Cobalt Silver Mg. Co. | | | Lake Huron and Superior, N. | | |
| Capital and date of charter..... | 29 | A xvi | Shore, notes by Coleman..... | 156, 157 | viii |
| Girard, George | | | Mattagami valley..... | 135 | A xv |
| Gold prospecting by, L. of the | | | Michipicoten div..... | 204, 205 | vii |
| Woods..... | 101, 102 | vi | | 288, 289 | A xiv |
| Stephen | | | Mississagi River dist..... | 39 | iii |
| Coal land bought by, Penn..... | 226 | ii | Nipigon Lake dist..... | 135, 147, 148 | A xvi |
| Girdwood, Dr. G. P. | | | Notes on, by Bell..... | 48-52 | R C |
| Analyses and assays by, of: | | | Ottawa and vicinity..... | 30-32 | B xv |
| iron ore, Pic river..... | 37 | R C | valley..... | 226, 227 | x |
| | 313 | xii | Prescott..... | 32 | B xv |
| quartz, Partridge lake..... | 26 | R C | Sudbury dist., paper by Coleman. | | |
| Girouard, E. | 34, 35 | A xvi | | 101-103 | C xiv |
| Giroux, Michael | 256 | ii | Wabigoon Lake area..... | 172 | vii |
| N. J. | | | Western Ontario, notes by Cole- | | |
| Ref. to surveys by, in Carleton co. | 37 | B xiii | man..... | 88-93 | v |
| lake, COLEMAN TP., NIP. | | | Gladstone and Sulphuret Gold Mg. | | |
| Mining class at..... | 45 | A xv | Co. | | |
| | 53 | A xvi | Capital and date of charter..... | 9 | vii |
| Silver veins near..... | 26 | B xiv | gold mine, MARMORA TP., | | |
| | 85 | A xv | HASTINGS CO. | | |
| Girteau, Charles | 86 | A xiv | Evidence <i>re</i> before R. C..... | 110, 111 | R C |
| | 105 | A xv | Position of..... | 28 | R C |
| Glacial striae. | | | gravel pit, NEAR PRESCOTT. | | |
| Abitibi region..... | 115 | A xiii | Altitude of..... | 242 | A xiii |
| Abitibi lake..... | 200 | A xiv | Minor refs. to..... | 220, 227 | x |
| river..... | 181 | viii | tp., ALG. | | |
| | 185, 206 | A xiv | Copper in..... | 23 | xi |
| Algoma-Nipissing boundary line. | 181 | vi | Glamorgan tp., HALIBURTON CO. | | |
| | 211 | x | Iron ore in, analysis..... | 62 | ii |
| Black river..... | 186 | xii | exhibited at World's | | |
| Blanche river..... | 181-183 | xii | Fair..... | 82 | ii |
| Davis lake..... | 111 | A xiii | magnetite, analysis. | 201, 202 | ix |
| Flying-loon lake, near..... | 173 | vii | mining, notes by | | |
| Frederick House lake..... | 108 | A xiii | Pusey..... | 132 | R C |
| Gull lake, White-clay river..... | 184 | xii | | | |
| Hagersville (near)..... | 144 | xii | | | |

| | Page. | Vol. | | Page. | Vol. |
|---|----------------|------|--|-------------|------|
| Glamorgan tp.—<i>Con.</i> | | | Glen Lake Mining Co. | | |
| Nickel ore in..... | 231 | vii | Capital and date of charter..... | 28 A | xvi |
| pyrrhotite..... | 200 A | xvi | Morris, S. DUMFRIES TP., BRANT CO. | | |
| Railway through, for iron development..... | 61 | ii | Rocks near..... | 115 B | xiii |
| Rocks in, Grenville series..... | 56 B | xiii | Robertson, LOCHIEL TP., GLEN-GARRY CO. | | |
| marble..... | 83 | R C | Limestone quarries at..... | 46 B | xiii |
| syenite..... | 226, 228 | vii | Trenton formation at..... | 48 B | xiii |
| | 215 | viii | Roy, SCOTLAND. | | |
| Glasgow, SCOTLAND. | | | Beaches at..... | 225 A | xiii |
| Apatite shipments to, 1884-85.... | 443 | R C | Glenannan, TURNBERRY TP., HURON CO. | | |
| Exhibition at, good for Canadian mica..... | 28 | xi | Brick-yard at..... | 57 B | xv |
| Experiments at, with nickel-steel. <i>See also</i> Riley, James | 383 | R C | Glencoe, EKFRID TP., MIDDLESEX CO. | | |
| Nickel refinery at..... | 175 C | xiv | Oil at..... | 55 | R C |
| Steel ships first built at..... | 368 | R C | Salt at..... | 160 | R C |
| Glass, George W. | | | Glendinning, George <i>See next ref.</i> | | |
| Gold mining by, Manitou Lake dist..... | 76 | viii | Blair and Kerr. | | |
| | 62 | ix | Silver mining by, Coleman tp.... | 15 B | xiv |
| Manager, Glass Reef mine..... | 99 | x | | 7, 80, 85 A | xv |
| | 248 | xi | Glendower iron mine, BEDFORD TP., FRONTENAC CO. | | |
| Glass. | | | Boring at, with Govt. drill..... | 32 | iv |
| <i>See also</i> Mirrors. | | | | 5, 228 | v |
| Arsenic for making..... | 111, 114 | xi | Notes on..... | 58 | ii |
| | 32 B | xiv | by Bawden (historical)..... | 133, 134 | R C |
| Cobalt for staining..... | 74, 75 B | xiv | Folger (capacity).... | 135 | R C |
| Composition of flint, plate and window..... | 118, 119 | xi | Gibson and Miller.. | 227 | v |
| Fluo-hydric acid for etching on.. | 447 | R C | Merritt..... | 128 | R C |
| Iron pyrites for making..... | 256 | v | Ore from, exhibited at World's Fair..... | 81 | ii |
| Lime for making..... | 5, 6 B | xiii | Scapolite rock from, notes..... | 229 | viii |
| Natural gas in manufacture of.... | 159 | i | photo..... | 216, 217 | viii |
| Potsdam sandstone for..... | 40 | R C | Sulphur in..... | 86 | ii |
| Sand for making, Abitibi river... Missinaibi river. | 159 A | xiii | Glengarry co. | | |
| | 128 | iv | Limestone in, notes by Miller... | 46 B | xiii |
| Stone for making, L. Huron.... | 94 | i | Glennevis, LANCASTER TP., GLEN-GARRY CO. | | |
| Works for making, Port Colborne, suggested..... | 128 | i | Calcliferous formation at..... | 46 B | xiii |
| Reef gold mine, MANITOU LAKE, R.R.D. | | | Glenny, Robert | | |
| Notes on..... | 99 | x | Evidence by, before R. C..... | 121 | R C |
| retrospective..... | 248 | xi | Gypsum mining by, near Cayuga. | 242 | i |
| Photo of..... | 80, 81 | x | | 252 | ii |
| Reef Gold Mg. Co. | | | <i>See also next ref.</i> | | |
| Board of Directors..... | 99 | x | gypsum mine, GRAND RIVER. | | |
| Capital and date of charter..... | 10 | ix | Idle, 1892..... | 253 | ii |
| Work by, 1899..... | 62 | ix | Notes on..... | 241 | i |
| | | | by owner..... | 121, 122 | R C |
| Glasser, E. | | | Glenora, MARYSBURG TP., PRINCE EDWARD CO. | | |
| Notes by, on nickel deposits of New Caledonia..... | 147-150, 157 C | xiv | Terraces at..... | 240 A | xiii |
| Ref. to work by, in New Caledonia..... | 69 B | xiv | Glenwood, E. TILBURY TP., KENT CO. | | |
| Glaucodot. | | | Oil piped to, from Tilbury field. | 97 A | xvi |
| Composition of..... | 204 | xi | Glidden, J. N. | | |
| Glaucosite. | | | Mica mining by, Bedford tp.... | 133 | x |
| Difference between, and greenalite..... | 164 A | xv | Globe Refining Works. | | |
| Origin of..... | 165 A | xv | Graphite mining by, near Port Elmsley..... | 22 A | xiv |
| Rama tp..... | 198 | ix | | 23 A | xv |
| Gleason, Thomas W. | 68 | viii | | 25 A | xvi |
| Glen Allan, PEEL TP., WELLINGTON CO. | | | Glossary. | | |
| Gas well in, log..... | 110, 114 A | xv | Of geological and mining terms, by Bell..... | 528-545 | R C |
| Trenton formation at, height above tide level..... | 113 A | xv | Gloucester, Duke of (1774) | | |
| lake, COLEMAN TP., NIP. | | | Interested in copper mining, L. Superior..... | 93 | R C |
| Silver veins south of..... | 33, 34 B | xiv | | 209 | v |

| | Page. | Vol. | | Page. | Vol. | |
|--|----------|------|--|--------------------|-------|-----|
| Gloucester tp., CARLETON CO. | | | Goderich.—Con. | | | |
| Limestone in, analysis..... | 38 B | xiii | Salt at, depth..... | 55 | R C | |
| Marl in, analysis..... | 39 B | xiii | discovery..... | 21 A | xiii | |
| Oil in, boring for. <i>See</i> Ramsayville. | | | ref to Hunt's report on. | 184 | R C | |
| Peat in..... | 190 | i | works..... | 111 | ix | |
| | 197 | ii | | 22 A | xiii | |
| Glover, Sir John | 220, 221 | i | | 20 A | xiv | |
| tower. | | | Section of strata near..... | 67 B | xiii | |
| For pyrites ores, description.... | 194 A | xvi | Cement Brick Co. | | | |
| Gnats. | | | Capital and date of charter..... | 24 A | xiii | |
| Mississagi River dist..... | 172 | xii | Plant of, photo..... | 115 B | xv | |
| Gneiss. | | | Godfrey, C. H. <i>See</i> Godfrey mica mine. | | | |
| As a building-stone..... | 134 | iii | mica mine, HINCHINBROOKE TP., FRONTENAC CO. | | | |
| Canoe lake, petrography..... | 95 | v | Notes on, 1891..... | 245 | i | |
| Carlow tp., analysis..... | 227 | vi | Godmanchester tp., HUNTINGDON CO., QUE. | | | |
| Definition of..... | 9, 534 | R C | Peat in. <i>See</i> Huntingdon. | | | |
| | 236 | vi | Godon family, The, (A.E.J.N. AND T.) | | | |
| Effect on, of metamorphism | 65 | i | Mining by, in Michipicoten div. | 103 | viii | |
| French river..... | 66 | i | | 115 | ix | |
| Georgian bay..... | 67 | i | | 141 | x | |
| Indian lake (N. of Ignace), sketch | | | | 71 | xi | |
| of contact with granite..... | 162 | vii | | 66 | xii | |
| Kashabowie lake, petrography.. | 95 | v | | 48 A | xiii | |
| sketch..... | 96 | v | lake, MICHIPICOTEN DIV., ALG. | | | |
| Lake Huron, north of..... | 74 | i | Beaver north of..... | 293 A | xiv | |
| Lake of Bays, Th. B. d. sketch | | | Iron ore near..... | 315, 327, | 331 A | |
| showing contact with horn- | | | Minor ref. to..... | 286 A | xiv | |
| blende-schist..... | 167 | vii | Pyrrhotite near, prospecting for. | 332 A | xiv | |
| Lake of the Woods dist:— | | | Rocks on and near..... | 305, 306 | v | |
| enclosing Keewatin schist, photo. | 80, 81 | vii | Goethite. <i>See</i> Amethyst. | | | |
| Kashegogamog lake, petro- | | | Goetz family (Alois, George, Johanna, Mary, P. and Ruth). | | | |
| graphy..... | 146 | vii | <i>See also</i> Goetz iron claims. | | | |
| Kenora, quarried for building. | 76 | iv | Goetz lake named after..... | 158 | ix | |
| Quarry island, quarried for | | | Iron mining by, Michipicoten div. | 103 | vii | |
| masonry..... | 14 | iii | | 100, 103, 254, 256 | viii | |
| Lake Superior, north shore..... | 74 | i | | 113, 116 | ix | |
| | 129 | vi | | 141 | x | |
| Notes on, by Bell..... | 9, 10 | R C | | 168 | xi | |
| Onaping (near), photo..... | 66 C | xiv | iron claims, MICHIPICOTEN DIV. | | | |
| Ottawa valley, thickness..... | 65 | i | Description of, by Moore..... | 181 A | xv | |
| Paul lake, Sturgeon river..... | 69 | i | Section of, showing rocks..... | 183 A | xv | |
| Rainy Lake dist., petrography. | 77-81 | iv | lake, MICHIPICOTEN DIV. | | | |
| Timagami lake..... | 69 | i | Iron belt near, compared with | | | |
| Wabigoon Lake dist..... | 183 | vii | Vermilion range, U. S. | 175 | xi | |
| Wanapitei, photo of structure. | 124, 125 | vii | Minor ref. to..... | 154 | xi | |
| agglomerate. | | | Notes on, by Coleman..... | 158 | ix | |
| Cradle creek, Magpie river, photo. | 345 A | xiv | Rocks on and near: | | | |
| conglomerate. | | | cherty limestone..... | 196 | x | |
| Exhibit of, at World's Fair..... | 186 | ii | conglomerate..... | 203 | x | |
| granitoid | | | dike rocks..... | 214 A | xiii | |
| Rainy lake, photo..... | 77 | iv | greenstone..... | 157 | xi | |
| Sudbury dist., petrographical | | | petrographical notes..... | 179, 182 | xi | |
| notes..... | 292, 293 | xii | Goff's mill, FOLEY TP., P. S. D. | | | |
| Gobbins, J. P. | 103 | vii | Limestone at..... | 95 B | xiii | |
| Godard copper mine, FOLEY TP., P. S. D. | | | Gogebic iron range, MINNESOTA. | | | |
| | 168 | ix | Exhaustion of ore of, possible.... | 8 A | xiii | |
| Goderich, GODERICH TP., HURON CO. | | | Iron shipments from, 1884-88.... | 226 | R C | |
| Artesian wells of..... | 56 | i | | 1892-3.... | 146 | iii |
| Cement works at, photo..... | 115 B | xv | Gold. | | | |
| Corniferous formation near..... | 40 | R C | Alluvial, notes by Gracey, on | | | |
| Erie clay at, analysis..... | 14 B | xv | values of gravels..... | 257 | vii | |
| photo..... | 12, 13 B | xv | Association of, with arsenic, | | | |
| Onondaga formation at..... | 45 | R C | occurrences..... | 104-106 | xi | |
| Salt at. <i>See also</i> Attrill's well. | | | Determination of..... | 452 | R C | |
| boring for, notes by McEwan. | 54, 190 | R C | | 203 | vi | |
| Ransford. | 189 | R C | | | | |
| record..... | 185 | R C | | | | |

| | Page. | Vol. |
|---|---------------|------|
| Gold.—<i>Con.</i> | | |
| Formula for (native)..... | 201 | vi |
| Hardness of (native)..... | 202 | vi |
| Milling of, notes by Hardman. 237-243 | | vi |
| waste in slimes..... | 452 | R C |
| Mining of, retarded by duties... 217 | | R C |
| Occurrences of..... | 199 | ix |
| modes of..... | 206 | vi |
| Prospecting for, suitable regions. 120 | | vi |
| with divining rod. 108 | | vi |
| Specific gravity of (notes)..... | 202 | vi |
| Value of..... | 206 | vi |
| <hr/> | | |
| Australia, boring for..... | 165 | iii |
| Victoria..... | 233 | v |
| mode of occurrence... 71 | | iv |
| Brazil, with palladium..... | 7 A | xiv |
| France, Chalanches..... | 65 B | xiv |
| Scotland..... | 115 | R C |
| Transvaal, in kaolin..... | 70 B | xiv |
| United States: | | |
| Alaska, Treadwell mine..... | 27 | R C |
| Black hills, S. Dakota, mode of occurrence..... | 71 | iv |
| California, mode of occurrence..... | 71 | iv |
| Grant co., Oregon, mode of occurrence..... | 71 B | xiv |
| Production, 1887..... | 213 | R C |
| 1888..... | 525 | R C |
| Rainy lake, Minn..... | 13 | iii |
| 53, 54 | | iv |
| 63 | | v |
| Canada. | | |
| Chaudière river, Que., ref. to... 118 | | R C |
| Nova Scotia, discovery..... | 115 | R C |
| notes by Selwyn. 66, 67 | | R C |
| Statistics, 1870, 1880..... | 200 | R C |
| 1881-1887..... | 244 | R C |
| 1886-1887..... | 209, 213, 243 | R C |
| 1888..... | 525 | R C |
| ONTARIO. | | |
| Alluvial, rarity of, reason for... 192 | | ii |
| 72 | | iv |
| 119 | | vi |
| <i>See also</i> Cobalt lake. | | |
| Mississagi river. | | |
| Onaping lake. | | |
| Savant lake. | | |
| Vermilion river. | | |
| Wanapitei river. | | |
| Distribution..... | 2 Bull. | i |
| 191, 192 | | ii |
| 219 | | v |
| 199 | | ix |
| in Huronian, notes | | |
| by Bell..... | 25-29 | R C |
| notes by Blue..... | 175 | i |
| 8 | | v |
| Merritt.. 106-110 | | R C |
| Earliest record of..... | 114 | R C |
| Evidence <i>re</i> , before R. C..... | 110-116 | R C |
| Industry of, 1897, notes by Coleman | | |
| man..... | 143, 144 | vii |
| Mining of, reports by officers of Bureau: | | |
| 1891..... | 222-225 | i |
| 1892..... | 231-239 | ii |
| 1894..... | 225-237 | iv |

| | Page. | Vol. |
|--|-----------------|------|
| Gold.—<i>Con.</i> | | |
| Mining of, reports by officers of Bureau.— <i>Con.</i> | | |
| 1895..... | 261-266 | v |
| 1896..... | 47-61, 248-270 | vi |
| 1897..... | 35-93 | vii |
| 1898..... | 39-99 | viii |
| 1899..... | 35-83, 89-94 | ix |
| 1900..... | 69-108, 114-118 | x |
| 1901..... | 231-298 | xii |
| 1902..... | 77-96, 108-112 | xii |
| 1903..... | 59-72, 93 A | xiii |
| 1904..... | 45-59, 76, 77 A | xiv |
| 1905..... | 48-59 A | xv |
| 1906..... | 52-60, 74-76 A | xvi |
| Papers and reports on, by: | | |
| Blue..... | 11-61 | iii |
| Coleman..... | 35-100 | iv |
| (western)..... | Bull. i | |
| 47-106 | | v |
| 71-124 | | vi |
| 110-144 | | vii |
| Miller (eastern)..... | 186-207 | xi |
| Royalties on, abandoned..... | 128 | v |
| Statistics of, 1870, 1880..... | 210 | R C |
| 1888..... | 72, 210 | R C |
| 1892..... | 9, 11 | ii |
| 1893..... | 8 Bull. | i |
| ix | | viii |
| 8, 10 | | iii |
| 1894..... | 11, 25 | iv |
| 1895..... | 4, 11, 18 | v |
| ix | | viii |
| 1896..... | 13, 47 | vi |
| 1897..... | 15, 28 | vii |
| 1897-98..... | Preface, Pt. ii | vii |
| Pt. iii | | vii |
| 1898..... | 11, 21 | viii |
| 1899..... | ix | viii |
| 13, 18 | | ix |
| 1900..... | 7, 11, 12, 37 | x |
| 1900-1901..... | 7 | x |
| 1901..... | 8, 9, 12-14 | xi |
| 1902..... | 12-14 | xii |
| 1903..... | 2-5 A | xiii |
| 1904..... | 1-4, 43 A | xiv |
| 1905..... | 1-4 A | xv |
| 1906..... | 3-7 A | xvi |
| Addington co. | | |
| Marble lake..... | 41, 42 A | xv |
| Algoma dist. | | |
| Algoma-Nipissing line. 171, 174, 179-184 | | vi |
| Bruce mines..... | 37 | iii |
| Galbraith tp..... | 37-45 | iii |
| Lacloche mtns..... | 69 | R C |
| Lake Huron, evidence before R. C. 114 | | R C |
| Mattagami river..... | 181 | x |
| 180 A | | xvi |
| Michipicoten div. | | |
| associated with iron..... | 183 A | xv |
| Chippewa lake..... | 202 | viii |
| discovery..... | 175 A | xv |
| Goulais river..... | 203 | viii |
| Michipicoten (near)..... | 202 | vii |
| Michipicoten river..... | 192 | vii |
| Missinabi (alluvial)..... | 197 | vii |
| notes by Willmott..... | 9-11 Bull. | iii |
| 145, 146 | | viii |
| 95 | | xi |

| | Page. | Vol. |
|---|--------------|------|
| Gold.—Con. | | |
| ONTARIO.—Con. | | |
| Michipicoten div.— <i>Con.</i> | | |
| report, 1897..... | 101, 184-205 | vii |
| 1898..... | 100, 101 | viii |
| 1899..... | 112-118 | ix |
| 1900..... | 137-144 | x |
| 1901..... | 72, 73 | xi |
| 1902..... | 78-80 | xii |
| 1903..... | 46, 47 A | xiii |
| Wawa (near)..... | 194 | vii |
| Mississagi river (alluvial)..... | 149 | viii |
| | 163, 164 | xii |
| Night-hawk Lake reg..... | 129, 130 | ix |
| notes by Miller..... | 221 A | xvi |
| Niven's base-line and S. of..... | 141 | ix |
| Sault Ste. Marie region..... | 59, 60 | R C |
| Sudbury dist..... | 92 | i |
| associated with copper..... | 89 | R C |
| nickel..... | 283 | xii |
| | 151, 153 C | xiv |
| Creighton tp..... | 45-47 | iii |
| Denison tp. 26, 59, 105-108, 112, | | |
| 113, 205, 425, 426 | | R C |
| 31, 32 C | | xiv |
| Donnegana lake..... | 187 | x |
| evidence before R. C..... | 112-114 | R C |
| Fairbank tp..... | 47 | iii |
| Graham tp. (alluvial)..... | 105 | R C |
| (reef)..... | 112 | R C |
| Onaping lake (alluvial)..... | 258 | vii |
| | 187 | x |
| Thessalon river..... | 66, 203 | R C |
| Vermilion river and vicinity. | | |
| notes by Gibson..... | 17, 18 | xi |
| Gracey..... | 256-259 | vii |
| report by Coleman..... | 151-159 | x |
| Wallace mine (near)..... | 59 | R C |
| Wellington mine..... | 37 | iii |
| Frontenac co. | | |
| Barrie tp..... | 203 | xi |
| Hastings co. | | |
| Discovery and early mining... 53-55 | | iii |
| Prospecting, 1897..... | 234 | vii |
| Madoc tp., discovery..... | 35 | iv |
| formation..... | 39 | iv |
| <i>See also</i> Madoc and Marmora tps. | | |
| Nipissing dist. | | |
| Abitibi lake, notes by Miller. 219, 220 A | | xvi |
| Algoma-Nipissing line. 171, 174, 179-184 | | vi |
| Bucke tp., with cobaltite..... | 23, 31 B | xiv |
| Cobalt lake, auriferous sand..... | 9 A | xv |
| Larder lake, discovery... 6, 55, 219 A | | xvi |
| report by Brock. 202-218 A | | xvi |
| MacLennan tp., notes on boring | | |
| for..... | 229, 230 | v |
| Timagami Lake reg..... | 56, 57 | R C |
| Arsenic lake (near)..... | 73 A | xiv |
| Emerald lake..... | 175 | x |
| Rabbit lake..... | 29 B | xiv |
| Wanapitei lake..... | 112 | R C |
| | 92 | i |
| | 13 | iii |
| river..... | 258 | vii |
| Parry Sound dist. | | |
| Foley tp., notes by Coleman. 98-100 | | iv |
| <i>See also</i> McGown mine. | | |

| | Page. | Vol. |
|--------------------------------------|-----------------------|------|
| Gold.—Con. | | |
| Peterboro' co. | | |
| Belmont tp..... | 4 | i |
| | 51, 52 | iii |
| notes by Blue..... | 47-50 | iii |
| Chandos tp., prospecting for..... | 215 | viii |
| Harvey tp..... | 213 | xiii |
| Rainy River dist. | | |
| Fourth base line, traces..... | 177 | vii |
| Fifth meridian..... | 179 | vii |
| L. of the Woods dist. | | |
| discovery..... | 122 | iv |
| disputed titles..... | 206 | R C |
| mining by Anglo-Gold Estates. 40, 41 | | x |
| reports by Bureau officers | | |
| 1891..... | 223 | i |
| 1892..... | 231-233 | ii |
| 1893..... | 13-34 | iii |
| 1894..... | 68-70 | iv |
| 1895..... | 168-188 | v |
| 1896..... | 10-104 | vi |
| 1897..... | 36-62 | vii |
| 1898..... | 50-69 | viii |
| 1899..... | 36-46 | ix |
| 1900..... | 69-79 | x |
| 1901..... | 80, 81, 250-254 | xi |
| 1902..... | 93-96 | xii |
| 1903..... | 59-61 A | xiii |
| 1904..... | 34, 47 A | xiv |
| 1905..... | 55-59 A | xv |
| 60 A | | xvi |
| notes by Coleman..... | 67, 68 | iv |
| Sultana island..... | xvi | R C |
| <i>See also</i> Sultana g. m. | | |
| Manitou-Wabigoon region. | | |
| Manitou lake, alluvial..... | 163 | v |
| reports on mining:— | | |
| 1894..... | 62-67 | iv |
| 1895..... | 51-53 | v |
| 1896..... | 83-87 | vi |
| 1897..... | 75-77 | vii |
| 1898..... | 75-76 | viii |
| 1899..... | 61-64 | ix |
| 1900..... | 97-102 | x |
| 1901..... | 247-250 | xi |
| 1902..... | 91-93 | xii |
| 1903..... | 68-70 A | xiii |
| 1904..... | 51-54 A | xiv |
| 1905..... | 50-53 A | xv |
| 1906..... | 55-59 A | xvi |
| Wabigoon, near..... | 171 | vii |
| Pelican lake..... | 178 | vii |
| Rainy Lake region. | | |
| alluvial, cause of absence..... | 72 | iv |
| early knowledge..... | 123 | iv |
| report by Coleman..... | 40-98 | iv |
| Seine River dist. | | |
| Bennett tp..... | 152 | v |
| Harold lake, notes by Blue. 145-148 | | v |
| reports on mining:— | | |
| 1894..... | 55-60 | iv |
| 1895..... | 62-74 | v |
| 1896..... | 72, 79-259-263 | vi |
| 1897..... | 62-75 | vii |
| 1898..... | 76-94, 263-279 | viii |
| 1899..... | 64-80 | ix |
| 1900..... | 79-85, 93-96, 103-107 | x |
| 1901..... | 150 | xi |
| Seine river..... | 64 | R C |

| | Page. | Vol. | | Page. | Vol. |
|---|-------|------|--|-------|------|
| Gold.—<i>Con.</i> | | | Gold Creek gold mine, PINE PORT- | | |
| Thunder Bay dist. | | | AGE BAY, L. OF THE WOODS. | | |
| Lake Superior.....60, 61, 114, 115 | R C | | Notes on, 1892.....232 | ii | |
| Caribou island, prospecting | | | Creek Mines and Exploration | | |
| for.....111, 209 | v | | Co. | | |
| Jackfish bay...85, 104, 112, 113 | v | | Capital and date of charter.....9 | vii | |
| notes by P. McKellar...189, 190 | v | | Explorers of Canada.....122 | vii | |
| Michipicoten island, legend...112 | v | | Fields Co. of Michipicoten. | | |
| Pukaskwa river, near.....354 A | xiv | | Capital and date of charter.....9 | vii | |
| Port Arthur dist., Three A mine..28 | R C | | Work by, 1897.....100 | vii | |
| Shelbandowan Lake dist:— | | | hill, LARDER LAKE, NIP. | | |
| Moss tp. See Huronian g. m. | | | Conglomerate on.....211 A | xvi | |
| Round lake.....118 | v | | Hill claim, LARDER LAKE, | | |
| Sturgeon Lake dist.....46 | ix | | NIP. | | |
| 38-40 | x | | Rocks of.....210, 215 A | xvi | |
| 15, 16, 147, 149, 256 | xi | | Hill Co.....232, 235 | ii | |
| 82-90 | xii | | Hill gold mine, NEAR BIG- | | |
| 59, 60 A | xiii | | STONE BAY, L. OF THE WOODS. | | |
| 3, 51, 55 A | xiv | | Acquired by Britannia Cons'd. G. | | |
| 60 A | xv | | Mg. Co.....43 | ix | |
| 4, 47, 59 A | xvi | | Evidence <i>re</i> before R. C.....64, 116 | R C | |
| Savant lake, alluvial.....18 | xi | | Map of.....173 | v | |
| | 89 | xii | Mill erected at.....4 | i | |
| Gold and Silver Mountain Mg. Co. | | | Notes on, <i>by</i> Blue.....172, 175 | v | |
| Capital and date of charter.....29 A | xvi | | Coleman.....68 | iv | |
| and Silver Reduction Works, | | | Merritt.....109 | R C | |
| KENORA. | | | 1896.....50, 98, 251 | vi | |
| See Lake of the Woods Gold and | | | 1897.....37, 112 | vii | |
| Silver Reduction Co. | | | Photo of.....128, 129 | v | |
| Brick Mining and Develop- | | | Work by, for Golden Gate g. m..6 Bull. | i | |
| ment Co. | | | Hills Exploration and De- | | |
| Capital and date of charter.....9 | vii | | velopment Co. | | |
| Bug gold mine, SEINE RIVER | | | Capital and date of charter.....9 | vii | |
| DIST., R. R. D. | | | Horn Mining Co. | | |
| Notes on, 1898.....274 | viii | | Capital and date of charter.....9 | vii | |
| 1899.....75, 76 | ix | | King Mining Co. | | |
| Rocks in, felsite schists.....262 | viii | | Capital and date of charter.....9 | vii | |
| Bug Mining Co. | | | lake, L. OF THE WOODS, R.R.D. | | |
| Capital and date of charter.....10 | ix | | Auriferous veins on.....25 | iii | |
| See also Gold Bug gold mine. | | | Contact veins near.....117 | R C | |
| Bullion Mining Co. | | | Minor ref. to.....112 | vii | |
| Bad gold mine owned by.....38 | ix | | Leaf Mining Co. | | |
| Capital and date of charter.....7 | vii | | Capital and date of charter.....10 | ix | |
| | 10 | ix | Work by, 1899.....60 | ix | |
| Work by, L. of the Woods...117, 120 | vii | | Moose mine, VAN HORNETP. | | |
| 36 | ix | | Accident in.....54, 57 | xi | |
| Cliff mine, KOOKAGAMING | | | Notes on, 1901.....244 | xi | |
| LAKE, STURGEON RIVER, NIP. | | | Mountain mine, N. W. OF L. | | |
| Notes on, 1896.....57 | vi | | OF THE WOODS. | | |
| 1897-98.....87, 139 | vii | | Notes on, <i>by</i> Blue.....186, 187 | v | |
| Cliff Mg. and Development | | | Mountain Mg. Co. | | |
| Co. | | | Capital and date of charter.....11 | xi | |
| Capital and date of charter.....9 | vii | | Panner mine, STURGEON LAKE, | | |
| Work by, 1897.....139 | vii | | L. OF THE WOODS DIST. | | |
| Coin gold mine, HELLDIVER | | | Notes on, 1899.....49 | ix | |
| BAY, L. OF THE WOODS...53, 121 | vii | | 1900.....74, 75 | x | |
| Coin Mining Co. | | | Option money paid on, 1902.....96 | xii | |
| Capital and date of charter.....10 | ix | | Panner Mining Co. | | |
| Work by, near Dryden, 1904...51 A | xiv | | Capital and date of charter.....10 | ix | |
| creek, MATAWIN RIVER. | | | Work by, Sturgeon lake.....49 | ix | |
| Gold claims on.....81, 82 | v | | Quarry Mining Co. | | |
| Minor ref. to.....130 | v | | Capital and date of charter.....10 | ix | |
| Notes on, <i>by</i> Blue.....129 | v | | Quartz, Free Milling, Mining | | |
| Striae on.....89 | v | | and Development Co. | | |
| creek, PINE PORTAGE BAY, L. | | | Capital and date of charter.....9 | vii | |
| OF THE WOODS. | | | Reefs Co. | | |
| Hessite on.....199 | ix | | Capital and date of charter.....10 | ix | |
| analysis.....105 | v | | Work by, Lake of the Woods...59 | ix | |

| | Page. | Vol. | | Page. | Vol. |
|---------------------------------------|-------------|------|---|--------------|------|
| Gold Reserve Mg. Co. | | | Golden Eagle Mining and Explora= | | |
| Capital and date of charter..... | 9 | ix | tion Co. | | |
| Rock, ANZHEKUMMING LAKE, | | | Capital and date of charter..... | 10 | ix |
| R. R. D. | | | Work by, 1901..... | 244 | xi |
| Gold mining near, 1903..... | 66 A | xiii | 1902..... | 93 | xii |
| 1904..... | 52 A | xiv | <i>See also</i> Golden Eagle g. m. | | |
| 1905..... | 50-53 A | xv | Fissure Gold Mg. Co. | | |
| <i>See also</i> Victory gold mine and | | | Capital and date of charter..... | 7 | vi |
| next ref. |  |  | ..... | 9 | vii |
| Minor ref. to..... | 98 | x | Work by, 1896..... | 54 | vi |
| Rock gold mine, ANZHEKUM- | | | Fleece gold mine, KALADAR | | |
| MING LAKE, R. R. D. | | | TP., LENNOX CO. | | |
| Notes on, 1903..... | 66 A | xiii | Cyanite in..... | 200 | ix |
| and photo, 1905..... | 52-54 A | xv | Notes on..... | 76 A | xvi |
| Rock Mining and Smelting Co. | | | Rocks in and near..... | 200-202 | xi |
| Capital and date of charter..... | 9 | vii | Tourmaline in, with mispickel | 203 | xi |
| Work by, 1903..... | 66 A | xiii | Gate gold mine, BIGSTONE | | |
| suspended, 1906..... | 59 A | xvi | BAY, L. OF THE WOODS. | | |
| Standard Mg. Co. | | | Map of..... | 173, 171 | v |
| Capital and date of charter..... | 38 A | xiii | Minor ref. to..... | 21 | iii |
| Mine of, photo..... | 48-49 | xii | Notes on, 1896..... | 98, 251, 252 | vi |
| Work by, 1900..... | 100 | x | 1897..... | 37, 38, 112 | vii |
| 1901..... | 250 | xi | Gate Mg. and Dev. Co. | | |
| 1903..... | 68 A | xiii | Capital and date of charter..... | 9 | vii |
| Sun mine, KAKAGI LAKE, R. | | | Goblin Mining Co. | | |
| R. D. | | | Capital and date of charter..... | 9 | vii |
| Photo of..... | 112, 113 | ix | Hecla Mines Syn. | | |
| Sun Mining Co. | | | Work by, 1900..... | 108 | x |
| Capital and date of charter..... | 10 | x | Horn gold mine, RUSH BAY, | | |
| Work by, 1899..... | 51 | ix | L. OF THE WOODS. | | |
| Winner mine, N. E. OF SAW- | | | Notes on, 1901..... | 251, 252 | xi |
| BILL LAKE. | | | 1902..... | 94 | xii |
| Notes on, 1901..... | 105 | x | 1903..... | 61 A | xiii |
| Winner Mining Co. | | | 1904..... | 47 A | xiv |
| Capital and date of charter..... | 10 | x | 1905..... | 59 A | xv |
| Goldberg, SILENSIA. | | | Operating, 1904..... | 4, 34 | xiv |
| Mispickel ores of..... | 38 | iv | Photo of..... | Facing | 47 A |
| Golden, COLORADO, U. S. | | | Producing, 1906..... | 6, 60 A | x |
| Mining school at..... | 509 | R C | Re-opening of, expected..... | 43 A | xvi |
| Paying clay from, analysis. | | | island, NIGHT-HAWK LAKE, | | |
| Crescent (A. D. 2) gold mine, | | | ALG. | | |
| NEAR MINE CENTRE, R. R. D. | | | Gold mining on..... | 220 A | xvi |
| Character of vein in..... | 262 | viii | Island Mining Co. | | |
| Idle, 1898..... | 277, 281 | viii | Capital and date of charter..... | 9 | vii |
| Named Golden Crescent..... | 273 | viii | Park gold mine, VAN HORNE | | |
| Notes on, by Blue..... | 157 | v | TP., R. R. D. | | |
| Coleman..... | 64 | v | Notes on, 1906..... | 59 A | xvi |
| 1897..... | 74, 75, 129 | vii | Park Mg. Co. | | |
| 1898..... | 273 | viii | Capital and date of charter..... | 28 A | xvi |
| 1899..... | 71 | ix | Claims of..... | 59 A | xvi |
| 1900..... | 82 | x | Pocket mine, NEAR ABRAM | | |
| Photo of vein in..... | 16, 17 | vii | LAKE, R. R. D. | | |
| Crescent Gold Mg. Co. | | | Prince Mining and Develop= | | |
| <i>See also</i> Golden Crescent gold | | | ment Co. | | |
| mine. | | | Capital and date of charter..... | 9 | vii |
| Capital and date of charter..... | 10 | ix | Reef gold mine. See Mikado | | |
| Work by, 1899..... | 273 | vii | Reef gold mine. | | |
| Crown Mining Co. | | | Reef Mg. Co. (1). | | |
| Capital and date of charter..... | 9 | vii | Capital and date of charter..... | 9 | xii |
| Eagle gold mine, EAGLE LAKE | | | <i>See also</i> Mikado Reef gold mine. | | |
| DIST., R. R. D. | | | Reef Mg. Co. (2). | | |
| Idle, 1902..... | 55 A | xv | Capital and date of charter..... | 29 A | xvi |
| Minor ref. to..... | 49 | xii | Rod Mg. Co. | | |
| Notes on, 1901..... | 244 | xi | Capital and date of charter..... | 10 | ix |
| 1902..... | 93 | xii | Work by, 1899..... | 64 | ix |
| 1903..... | 64 A | xiii | Slipper gold claim, NEAR | | |
| Eagle mine, PRINOLE TP., | | | MOORE BAY, L. OF THE | | |
| P. S. D. | | | WOODS. | 21 | iii |
| Rocks of..... | 171 | ix | ..... | 252 | vi |

| | Page. | Vol. | | Page. | Vol. |
|---|--------------------|--------|--|----------|--------|
| Golden Star gold mine, S. of BAD | | | Gondreau, M. | 141 | x |
| VERMILION LAKE, R. R. D. | | | <i>Goniatis unigularis.</i> | | |
| Accident at, 1898..... | 26, 27 | viii | Thedford..... | 154 | xii |
| 1899..... | 30 | ix | | 69 | B xiii |
| 1900..... | 43 | x | <i>Goniophora.</i> | | |
| Boring in, 1901..... | 15, 16, 59, 60 | xi | Kwataboahegan river, notes.... | 188 | A xiii |
| Conglomerates near..... | 144 | xi | photo.... | 192 | A xiii |
| Depth of, 1899..... | 35 | ix | Good, George P. | 99 | xii |
| Mill at, transferred to St. | | | and Jones. | 233 | ii |
| Anthony Reef g. m..... | 5 | A xiii | Goodburry, (not Goodbery) Lorenzo | | |
| Mining class at, 1898..... | 281 | viii | Limestone from quarry of, ana- | | |
| Notes on, 1897..... | 73, 74 | vii | lysis..... | 45, 46 | B xiii |
| 1898, by Bain 77, 78, 277, 278 | | viii | Goodenow—? | | |
| Bow..... | 76-79 | viii | Limestone quarry of, Clinton | | |
| Coleman..... | 129 | viii | formation..... | 116 | B xiii |
| DeKalb..... | 45, 46 | viii | fossils in..... | 117 | B xiii |
| 1899, by Bow..... | 66-68 | ix | Gooderham, Charles. | 44 | ix |
| 1900..... | 38, 79, 80, 93, 94 | x | | 71 | x |
| 1901..... | 242, 243 | xi | Gooderham, GLAMORGAN TP., VIC- | | |
| Photos of..... | 64, 65 | vii | TORIA CO. | | |
| Plan and section of..... | 294, 295 | viii | Nepheline-syenite near..... | 228 | vii |
| Report (special) on, by Bow..... | 263-270 | viii | Goodlet, William | 515, 517 | R C |
| Section of..... | 64, 65 | viii | Goodrow gold mine. | 77 | xii |
| | 69 | ix | Goodspeed, J. W. | 66 | xii |
| Shut down, 1900..... | 37 | x | T. H..... | 66 | xii |
| Star Mining Co. | | | Goodwin, E. P. | 50 | A xvi |
| Capital and date of charter..... | 11 | xi | W. B..... | 141 | x |
| Formed from Golden Star Mg. & | | | | 74 | xi |
| Ex. Co..... | 98 | x | Dr. W. L. | | |
| Star Mining and Exploration | | | Acknowledgments to..... | 208 | vii |
| Co. | | | Analysis by, of a columbite min- | | |
| Capital and date of charter..... | 9 | vii | eral..... | 236 | vii |
| Work by, 1898..... | 45 | viii | Analysis by, of Tip Top copper | | |
| <i>See also</i> Golden Star g. m. | | | ores..... | 75 | v |
| Thorn gold mine, LARDER | | | Description by, of some of the | | |
| LAKE, NIP. | | | principal minerals..... | 206-229 | vi |
| Rocks near..... | 207 | A xvi | Notes by, on analysis of corundum | | |
| Keewatin, photo..... | 209 | A xvi | and corundum-bearing rocks. 238, 239 | | vii |
| Twins Mg. Co. See New | | | ref. to..... | 230, 245 | vii |
| Golden Twins. | | | Notes by, on pyrites industry .. | 196 | A xvi |
| Valley, PRINGLE TP., P. S. D. | | | Professor of chemistry, Queen's | | |
| Farm lands around..... | 170 | ix | University..... | 216 | i |
| Whale gold mine, NEW KLON- | | | Report by, on Kingston School | | |
| DIKE DIST., R. R. D. | | | of Mines, 1898..... | 259-263 | vii |
| As Golden Whale mine,..... | 63, 64 | ix | Report by, 1898, on Summer Min- | | |
| | 90 | x | ing Classes. | | |
| Munroe's mine..... | 77 | vii | 1898..... | 282, 283 | viii |
| | 42, 73 | viii | 1901..... | 61-69 | xi |
| Sakoose mine. <i>See</i> Sakoose | | | 1902..... | 54-61 | xii |
| mine. | | | 1903..... | 52-57 | A xiii |
| Goldenrod. | | | 1904..... | 37-42 | A xiv |
| Abitibi dist..... | 253 | A xiv | 1905..... | 39-46 | A xv |
| Goldfinch, American | | | 1906..... | 49-54 | A xvi |
| Abitibi dist..... | 243 | A xiv | Work by, 1901..... | 7 | xi |
| Goldie, T. L. | | | 1902..... | 9 | xii |
| Work by, 1905..... | 175, 200 | A xv | 1903..... | x | A xiii |
| 1906..... | 105 | A xvi | W. M. | | |
| and McCulloch Co. | 67 | B xv | Work by, 1895..... | 39 | A xv |
| Golding, Isaac | 105 | xi | lake, LORRAIN TP., NIP. | | |
| Goldspitz, BOHEMIA. | | | Minor ref. to..... | 35 | B xiv |
| Melaphyre from..... | 171 | viii | Rocks near, Huronian..... | 40 | B xiv |
| <i>Gomphocras.</i> | | | Goodyear—? | 19 | vi |
| Abitibi river..... | 187 | viii | <i>Goodyear repens.</i> | | |
| " <i>beta.</i> | | | Abitibi dist..... | 241 | A xiv |
| Kwataboahegan river..... | 190 | A xiii | Mattagami valley..... | 151 | A xv |
| " <i>crinitum.</i> | | | Goold, A. H. W. | 103 | vii |
| Anderdon tp..... | 125 | xi | E. L..... | 18 | B xiii |
| St. Marys..... | 152 | xii | Goose. See Geese. | | |
| | 96 | B xiii | | | |

| | Page. | Vol. | | Page. | Vol. |
|--|----------|------|---|-----------|------|
| Goose island, RAINY LAKE, R. R. D. | | | Gordon island, HARRICANAW RIVER, | | |
| Fissure veins on | 52, 55 | iv | JAMES BAY. | | |
| Rocks on, description | 82 | iv | Gypsum near | 158 A | xiii |
| photo | 77 | iv | lake, FAIRBANK TP., ALG. | | |
| lake, GOOSE RIVER, PISHKANOGAMA RIVER, ALG. | 135 | ix | Rocks on and near, acidic | 13, 24 C | xiv |
| point, NEAR PORT ARTHUR, | | | 37, 94, 134 C | xiv | |
| TH. B. D. | | | gold mine, FAIRBANK TP., ALG. | | |
| Rocks in vicinity of | 149 | ix | Work at, 1891 | 47 | iii |
| Striae at, direction | 178 | ix | placer claim, UPPER VERMILION RIVER, NIP. | | |
| river, PISHKANOGAMA RIVER, ALG. | | | Terrace on, altitude | 211 | A |
| Description of, by Parks | 135 | ix | 103 C | xiv | |
| Gooseberry. | | | Gore, The, NEAR HAGERSVILLE, HALDIMAND CO. | | |
| Abitibi dist. | 182 | viii | Rocks at | 145 | xii |
| 199, 253 A | xiv | | 55 B | xiii | |
| Goosefeather river, KATZENBACH LAKE, ALG. | 282 | A | Bay, MANITOULIN ISLAND, ALG. | | |
| Gopher Mining Co. | | | Hudson River formation at | 77 B | xiii |
| Capital and date of charter | 11 | xi | Limestone at, analysis | 75, 76 B | xiii |
| silver mine, STRANGE TP., TH. B. D. | | | quarries | 80 B | xiii |
| Animikie formation in | 225 | i | Brick and Tile Mfg. Co. | | |
| Character of veins in | 238 | iv | Capital and date of charter | 25 A | xv |
| Inspector's report on, 1891 | 228 | i | Lawn Mining and Development Co. | | |
| 1892 | 240 | ii | Capital and date of charter | 9 | viii |
| Gordaneer, William | 25 | ix | Gorenky, VLADIMIR PROV., RUSSIA. | | |
| Gordon, Lieut. | | | Peat near | 218 | ii |
| Notes by, on navigation of Hudson bay and strait | 131, 132 | iv | Gorge river, NEW ZEALAND. | | |
| A. C. | | | Awaruite in | 151 C | xiv |
| Accident to, at Sawbill gold mine | 26 | viii | Gorham tp., TH. B. D. | | |
| Alexander | 62 | ix | Iron ore in | 69 | ii |
| G. S. | 103 | vii | N. L. Smith's views | 77 | ii |
| J. R. | | | Gorman, F. M. | 239, 240 | i |
| Anthraxolite on property of | 3 Bull. | ii | and Co. | | |
| 159 | vi | | Owners, McKinley-Darragh mine | 5 A | xiv |
| 51 | x | | Gorringe club, COPPER CLIFF MINE. | | |
| Creighton and Fairbank tps. | | | Summer Mining Classes at | 87 | xii |
| prospected by | 46, 47 | iii | Gosage mica mine, LOUGHBORO TP., FRONTENAC CO. | | |
| Manager, Creighton gold mine | 236 | ii | 91 A | xiii | |
| 235 | iv | | Goschen, George Joachim | | |
| 261 | v | | Nickel adopted by, for armour plating | 47 | vi |
| James | 38 | ix | Gosfield tp., ESSEX CO. | | |
| John | 127 | i | Blast furnace in. <i>See</i> Olinda. | | |
| M. B. R. | 102 | viii | Natural gas in | 25 | vi |
| 47 | xii | | depth of wells | 28 | v |
| T. C. | | | log of hole | 114 A | xiv |
| Iron bounties paid to, 1901 | 26 | xi | petition re export to Detroit | 41 | vi |
| W. C. | 141 | x | <i>See also</i> Kingsville. | | |
| W. H. Lockhart | | | Oil in, notes on, 1890 | 117-120 | i |
| Evidence by, before Roy. Com. re:— | | | Goshawk, American | | |
| Minerals in Haliburton co. | 237 | RC | Abitibi dist. | 126 A | xiii |
| apatite | 173 | RC | 243 A | xiv | |
| public assayers | 429 | RC | Gossans. | | |
| prospector's rights | 261, 318 | RC | Analysis of various | 186 A | xvi |
| William | 58 | ix | Gosset, J. | | |
| 102 | x | | Limestone quarry of, analysis | 110 B | xii |
| Benson Cobalt Mg. Co. | | | Gothenburg, SWEDEN. | | |
| Capital and date of charter | 28 A | xvi | Peat used in, for sanitation | 216 | ii |
| camp, ROSS LAKE, VERMILION RIVER. | | | Goudreau lake, MICHIGOTEN DIV. | | |
| Gold prospecting near (alluvial) | 153 | x | Beach near, altitude | 193 A | xv |
| Cobalt Silver Mg. Co. | | | Crystalline limestone of | 192 A | xv |
| Capital and date of charter | 25 A | xv | Gossan from, analysis | 186 A | xvi |
| gold mine, RATHBUN TP., NIP. | | | Iron pyrites on and near | 183-187 A | xv |
| Notes on, 1895 | 262 | v | map showing | 185 A | xv |
| iron claim, S. SHERBROOKE TP., LANARK CO. | | | notes by Fraleek, 177-180 | 177-180 A | xvi |
| 49 | ii | | weathering | 181 A | xvi |
| | | | Minor ref. to | 294 A | xix |
| | | | Lacustrine deposits near | 132 A | xv |

| | Page | Vol. | | Page | Vol. | |
|---|---------------|--------|---|-----------------|--------|--------|
| Gough-Calthorpe, Somerset F. | 174 | v | Gouverneur, St. Lawrence Co., N.Y. | | | |
| tp., ALG. | | | Marble of, quality..... | 76, 80, 82 | R C | |
| Granite in..... | 69 | i | | 62, 63 | B xiii | |
| Goulais, A. | 106 | A XV | Talc mining at..... | 100-102 | iii | |
| bay, L. SUPERIOR. | | | Government diamond drills. | | | |
| Agricultural land near..... | 103 | iv | Advantage of..... | 425 | R C | |
| Conglomerate on..... | 203 | x | Purchase of..... | 167-172 | iv | |
| with chalcedony and jasper. 72 | | i | Regulations concerning..... | 172-174 | iv | |
| Copper near..... | 99 | R C | | 226 | v | |
| mining..... | 101 | xii | Use of, in foreign countries.. | 164-166 | iii | |
| See also Eagle copper mine. | | | Work by, Glendower iron mine. | 32 | iv | |
| Geology of district of..... | 149, 150 | viii | Matawin iron range.. | 131 | v | |
| Glacial striae near, direction.... | 157 | viii | Steep-rock Lake dist.. | 308 | xii | |
| Gold and silver on and near. 26, 60, 68 | | R C | 1894..... | 174-176 | iv | |
| mining 1904..... | 59 | A xiv | 1895..... | 4, 225-233 | v | |
| Huronian on and near.. | 157, 163, 164 | viii | 1900..... | 51-56 | x | |
| Iron ore near, analysis.... | 138, 139 | xi | 1901..... | 58-60 | xi | |
| Sandstone on and near..... | 40 | R C | 1902..... | 50-53 | xii | |
| | 127 | viii | 1903..... | 42-45 | A xiii | |
| Mg. Co. | | | 1904..... | 29, 30 | A xiv | |
| Capital and date of charter..... | 9 | xii | 1905..... | 26-28 | A xv | |
| river, LAKE SUPERIOR. | | | 1906..... | 31 | A xvi | |
| Beaches N. and S. of, level of... 155 | | viii | vein, Ferguson gold mine, | | | |
| Boulder-clay near..... | 156 | viii | SHOAL LAKE, SEINE RIVER. 5 Bull. | i | | |
| Gold and silver prospecting on.. | 203 | viii | | 80 | vi | |
| Lead on..... | 60, 203 | R C | Gow, J. | 28 | xii | |
| Minor ref. to..... | 202 | v | Gowan lake, McCANN TP., NIP. | 111 | A xiii | |
| Notes on, by Charlton, jr..... | 197 | viii | | 248 | A xiv | |
| geological..... | 150 | viii | tp., NIP. | | | |
| by Coleman..... | 127 | viii | Soil in, analysis..... | 247 | A xiv | |
| Report on country between, and | | | muskeg..... | 186, 220 | A xiv | |
| Dalton, by Charlton jr.... | 196-204 | viii | peat..... | 209 | A xiv | |
| Rocks on, trap..... | 15 | v | requires draining..... | 207 | A xiv | |
| Goulbourn tp., CARLETON CO. | | | Trees in..... | 220 | A xiv | |
| Limestone in, fossiliferous..... | 37 | B xiii | Gowans, R. | 141 | x | |
| Peat in..... | 190 | i | Grabau, Prof. | | | |
| | 198 | ii | Work by, on fossiliferous rocks | | | |
| Gould, E. L. | 33, 149 | xii | of Thedford..... | 154, 155 | xii | |
| | 31 | B xiii | | 69, 70 | B xiii | |
| | 154 | A xiv | Grace gold mine, EAGLE LAKE DIST., | | | |
| W. E. | 103 | vii | R. R. D..... | 93 | xii | |
| Shapley and Muir. | | | gold mine, S. OF WAWA LAKE, | | | |
| Record of well drilled by, Brant- | | | MICHIGICOTEN DIV. | | | |
| ford..... | 107 | A xiv | Closing of..... | 67, 175 | A xv | |
| lake, LOUGHBORO TP., FRONT- | | | Iron ore in..... | 183 | A xv | |
| ENAC CO. | | | Helen formation..... | 183 | xi | |
| Apatite mining near..... | 251 | ii | Machinery installed at, 1906.... | 59 | A xvi | |
| See also Coe apatite mine. | | | Mining class at, 1901..... | 68 | xi | |
| Mica mining on..... | 133 | x | | 54 | xii | |
| | 287 | xi | 1902..... | 54 | xii | |
| | 23 | A xvi | Minor refs. to..... | 49, 60, 61 | xii | |
| prospecting near..... | 92 | A xiii | Minerals in veins of..... | 57 | xiii | |
| | 103 | A xv | Notes on, 1900..... | 139 | x | |
| See also McLatchey mica mine. | | | 1901. 72, 150, 151, 237, 238 | | xi | |
| Rocks in vicinity of..... | 288 | xi | 1902..... | 64, 78, 79 | xii | |
| mica mine. See Gould lake. | | | 1903..... | 47, 64, 65, 222 | A xiii | |
| Mining Co. | | | 1904..... | 49 | A xiv | |
| Capital and date of charter..... | 9 | vii | 1905..... | 54 | A xv | |
| tp., ALG. | | | by Coleman..... | 222 | A xiii | |
| Copper in..... | 23 | xi | Photo of..... | 64, 65 | xi | |
| chalcocite..... | 196 | ix | Producing, 1902..... | 15 | xii | |
| mining..... | 37 | viii | | 1903..... | 4 | A xiii |
| See also Cheney mine. | | | Mining Co. | | | |
| prospecting..... | 25 | vii | Capital and date of charter..... | 11 | xi | |
| Goulet, Albert | 185 | v | Working Grace gold mine..... | 64 | A xiii | |
| Alfred | 185 | v | See also "....." | | | |
| Fred | 49 | ix | Gracey, Arthur H. | | | |
| Gourlay, Robert | 319, 327 | R C | Paper by, on placer gold, Ver- | | | |
| | | | million river.. | 256-259 | vii | |
| | | | refs. to..... | 151, 154-159 | x | |
| | | | | 17 | xi | |

| | Page. | Vol. |
|--|--------|--------|
| Grackle, bronzed | | |
| Abitibi dist. | 126 | A xiii |
| Grady, Michael | | |
| Evidence by, before R. C. <i>et</i> — | | |
| Glendower iron mine. | 135 | R C |
| Iron, Kingston dist. | 52 | R C |
| <i>ref. to</i> | 58 | ii |
| ..... | 227 | v |
| lake, BANGOR TP., HASTINGS CO. | 220 | vii |
| Graelle, Paul | 34, 35 | A XV |
| Graf, Anton | | |
| Designer of smelting works, Sud- | | |
| bury | 99 | ix |
| ..... | 144 | c xiv |
| Graff, Bennett and Co. | | |
| Labour employed by, statistics . | 370 | R C |
| Grafton, HALDIMAND TP., NORTHUM- | | |
| BERLAND CO. | | |
| Beaches at and near..... | 239 | A xiii |
| altitude | 222 | x |
| Graham, Mrs. A. | 103 | viii |
| F. | 216 | viii |
| G. A. | 264 | vi |
| Henry | 395 | R C |
| J. C. | | |
| Iron mining by, Atikokan range. 72, 73 | ii | |
| ..... | 35 | x |
| J. W. | 28 | xii |
| W. | 98 | A xvi |
| W. M. | 103 | vii |
| ..... | 48 | A xiii |
| brickyard, OTTAWA. | | |
| Fossils from | 224 | x |
| tp., ALGOMA DIST. | | |
| Copper in..... 24, 105, 106, | 425 | R C |
| Danaite in..... | 60 | B xiv |
| Farm land in. <i>See</i> Naughton. | | |
| Galena in..... | 106 | R C |
| Gold in..... | 92 | i |
| alluvial | 105 | R C |
| reef | 112 | R C |
| Iron pyrites in..... | 142, | R C |
| ..... | 207 | ix |
| ..... | 150 | A xvi |
| Mispickel in, analysis | 205 | ix |
| Rocks in, clay-slates..... | 73 | i |
| granite | 83 | c xiv |
| greenstone..... | 75 | i |
| norite | 242 | xii |
| ..... | 32 | c xiv |
| Grahame and Co. | | |
| Copper mining by, Black bay, L. | | |
| Superior..... | 109 | x |
| ..... | 275 | xi |
| Graisse river. <i>See</i> RIGAUD RIVER. | | |
| Graminea. | | |
| Ottawa (near)..... | 225 | x |
| Grand Calumet Mg. Co. | | |
| <i>See also</i> Zenith zinc mine. | | |
| Capital and date of charter..... | 9 | vii |
| Officers of..... | 86 | ix |
| falls, KAMINISTIKWIA RIVER. | | |
| <i>See</i> KAKABEKA FALLS. | | |
| Haven, OTTAWA CO., MICH. | | |
| Record of iron furnace near..... | 339 | R C |
| Hotel Co..... | 88 | xi |
| Manitoulin island. <i>See</i> MAN- | | |
| ITOULIN ISLAND. | | |

| | Page. | Vol. |
|---|-------------------|----------|
| Grandes Piles, RADNOR TP., CHAMP- | | |
| LAIN CO., QUE. | | |
| Charcoal making at | 26 | ii |
| Grand portage, MISSISSAGI RIVER, | | |
| ALG. | 165 | xii |
| Grand portage, BETWEEN DORE AND | | |
| MAGPIE RIVERS, ALG. | | |
| Faults north of..... | 311 | A xiv |
| Notes on, by J. M. Bell..... | 293, 294 | A xiv |
| Rocks south of..... | 305 | A xiv |
| Grand portage, PIGEON RIVER, TH.B.D. | | |
| Fort built at, by Northwest Co. 198, 199 | v | |
| copper mine. <i>See</i> Cheney | | |
| mine. | | |
| island, L. SUPERIOR. | | |
| Animikie rocks on..... | 31 | R C |
| Grande Presqu'île, L. OF THE WOODS. | | |
| Notes on, by Coleman..... | 115-120 | vii |
| Rocks on, petrographical notes. | | |
| ..... | 145, 146, 155 | vii |
| Grand rapid, MATTAGAMI RIVER. | | |
| Fall of..... | 32 | B xiii |
| Forest fires near..... | 177 | A xiii |
| Iron ore at | 9 | A xiii |
| clay iron-stone..... | 47 | R C |
| ..... | 32 | B xiii |
| limonite..... | 138, 152-156 | A xiii |
| notes | 317 | xii |
| and analysis..... | 126 | iv |
| spathic | 77 | ii |
| Length of..... | 32 | B xiii |
| Ochres near..... | 128 | iv |
| Soil near | 176 | A xiii |
| Grand rapid, MISSISSAGI RIVER, ALG. | | |
| Marine deposits near..... | 137 | vi |
| rapids, KENT CO., MICH. | | |
| Alabastine manufactured at..... | 254 | ii |
| Rapids Oil Co..... | 24 | vi |
| Recollect falls, FRENCH RIVER. | | |
| Syenite on..... | 67, 84 | i |
| river, L. ERIE. | | |
| Foring on, for gas..... | 137 | i |
| Cement quarry on..... | 55 | R C |
| Gypsum on | 110-113 | i |
| ..... | 199 | ix |
| ..... | 23 | x |
| ..... | 21 | A xiii |
| ..... | 52-54 | B xiii |
| analysis | 56 | B xiii |
| mining, 1891 | 241-243 | i |
| 1902 | 38 | xii |
| <i>See also</i> Paris mine. | | |
| Excelsior mine. | | |
| Martindale mine. | | |
| Torrence mine. | | |
| mining, evidence be- | | |
| fore Roy, Conn. | | |
| ..... | 45, 54, 121, 122 | R C |
| production, 1905 | 24 | A xv |
| ..... | 1906 | 25 A xvi |
| unsafe condition | 4 | i |
| notes..... | 147 | vii |
| by Blue..... | 19 | iv |
| Merritt | 119 | R C |
| sulphur in beds..... | 22 | A xvi |
| Rocks on, Guelph..... | 33, 114, 115, 121 | B xiii |
| Onondaga limestone..... | 115 | B xiii |
| analysis | 147 | xii |
| ..... | 34 | B xiii |
| Waterpower on..... | 279 | vi |

| | Page. | Vol. | | Page. | Vol. |
|---|----------|--------|--------------------------------------|--------------|---------|
| Grand Plaster Co. | | | Granite.—Con. | | |
| Merritt gypsum mine owned by... | 212 | i | Rainy River dist.— <i>Con.</i> | | |
| Notes on works of..... | 111 | i | Lake of the Woods:— | | |
| Trunk R'y. | | | Bag bay, plan showing alter- | | |
| Bridge of, at St. Marys, photo., 96, 97 | B xiii | | ation with trap..... | 64, 65 | viii |
| Iron works of, Hamilton..... | 329 | R C | petrographical notes..... | 155 | vii |
| Peat experiments by.... 199, 203-205 | i | | Regina bay..... | 91 | vi |
| 197 | ii | | mine, notes by Cole- | | |
| Pacific R'y. | | | man..... | 184, 185 | v |
| China clays to be opened up by.. | 9 | A xiii | Rainy Lake dist., notes by | | |
| Iron ores to be opened up by.... | 17 | A xiv | Coleman..... | 48, 49 | iv |
| Valley Peat Products. | | | petrography..... | 88-90 | iv |
| Capital and date of charter..... | 21 | A xiv | Seine river, gold mining in.... | 5 | Bull. i |
| Grange island, L. SUPERIOR. | | | Shoal lake, sketch of vein in.. | 66 | v |
| Sandstone quarries on..... | 79, 235 | R C | with anorthosite..... | 81 | vi |
| Grangesberg, SWEDEN. | | | Wabigoon and vicinity..... | 183 | vii |
| Wenstrom separator used at.... | 328 | xii | notes..... | 279 | viii |
| Granite. | | | Spanish River dist..... | 68, 69 | i |
| Canada, production, 1870, 1880, | | | Stony lake, Peterboro' co..... | 212 | viii |
| 1887..... | 209 | R C | Sturgeon lake, Th. B. d., petro- | | |
| 1886, 1887..... | 243 | R C | graphy..... | 105 | xii |
| Cornwall, Eng..... | 540 | R C | Sudbury dist..... | 69 | i |
| 162 | A xv | | analysis, notes and photos. | | |
| For building purposes, notes by | | | 82, 83, 123-125 | C xiv | |
| Coleman..... | 134, 136 | iii | McKim tp., photo..... | 54 | C xiv |
| For monumental purposes..... | 234 | vii | Timagami dist..... | 164, 165 | x |
| For street-paving..... | 105 | iii | Wanapitei lake, notes on..... | 150 | vii |
| Notes on, by Miller..... | 233, 234 | vi | gneiss. | | |
| Production, 1870, 1880, 1887.... | 210 | R C | Exhibit of, at World's Fair..... | 186 | ii |
| Prospecting in ranges of, advis- | | | porphyritic See Porphyritic | | |
| able..... | 166 | R C | granite. | | |
| The Great Huronian belt, notes | | | porphyry. | | |
| by Bell..... | 81 | i | Magpie river, petrography..... | 176 | xi |
| Aniakie iron range, petrographi- | | | Granite, GRANITE CO., MO. | 352 | R C |
| cal notes and photo.... | 161, 163 | A xv | island, BLACK BAY, L. OF THE | | |
| Cobalt dist., petrographical notes. | 45 | B xiv | WOODS. | | |
| Eagle river, L. Superior, photo. | | | Galena on..... | 38 | R C |
| 348-351 | A xiv | | 198 | ix | |
| Frontenac co.:— | | | lake, L. OF THE WOODS | | |
| Bedford tp..... | 52 | R C | Auriferous vein near..... | 25 | iii |
| Kingston, notes by McLean.... | 74 | R C | lake, STURGEON LAKE REG., TH. | | |
| Merritt..... | 83, 84 | R C | B AND R. D..... | 88 | xii |
| Palmerston tp..... | 218 | v | Mountain Mg. Co. | 353 | R C |
| Willets-holme, quarrying..... | 297 | xi | Granitelle. | | |
| Ganonoque, near..... | 296, 297 | xi | Composition of..... | 534 | R C |
| Hastings dist., notes by Miller.. | 212 | vii | Granitite. | | |
| Kaladar tp., petrographical notes. | 207 | xi | Composition of..... | 534 | R C |
| Lake Superior, north shore..... | 129 | vi | Grant, Finlay D. | | |
| Black bay..... | 205 | R C | Gold prospecting by, Michipi- | | |
| for quarrying..... | 61 | R C | coten div..... | 82, 103, 197 | vii |
| Gargantua cape..... | 67 | iii | G. H. | 141 | x |
| Jackfish bay, sketch of dike in. | 84 | v | G. M. | 178 | iii |
| petrography..... | 103, 104 | v | J. D. | 98 | A xvi |
| Loon lake, notes on..... | 255 | A xiv | Sir James | | |
| Mattagami valley, petrographical | | | Evidence by, before Roy. Com. re: | | |
| notes..... | 131 | A xv | phosphate industry..... | 180 | R C |
| Mattawishguia river..... | 209 | x | technical instruction..... | 424 | R C |
| Michipicoten div., petrography.. | 176 | xi | Views of, re mining men..... | 168 | i |
| Rainy River dist. | | | Capt. James A. | | |
| altered, with auriferous veins. | 86, 87 | v | Smelting furnace found by, in | | |
| auriferous, notes by Coleman. | | | Africa..... | 355 | R C |
| 101-103 | v | | Dr. John | | |
| Bad Vermilion lake, contact | | | Mica mining by, Loughboro' tp. | 135 | x |
| with Keewatin, photo..... | 64, 65 | vi | 103 | A xv | |
| Caribou lake..... | 63 | iv | Peter | 26 | A xiv |
| Ignace..... | 129 | xi | Dr. U. S. | | |
| Indian lake, sketch of contact | | | Notes by, on Little American | | |
| with gneiss..... | 162 | vii | mine..... | 54 | iv |
| | | | Wiegand mine..... | 56, 57 | iv |

| | Page. | Vol. | | Page. | Vol. |
|---|----------------|------|--|------------|------|
| Grant, Dr. U. S.—<i>Con.</i> | | | Graphite.—<i>Con.</i> | | |
| Refs. to surveys by, Rainy Lake | | | Cobalt dist..... | xi A | xiii |
| reg..... 83, 89, 92, 93 | iv | | 12 B | xiv | |
| 67, 97, 98 | v | | Denbigh tp..... | 27 | xii |
| 151 | vii | | Kinmount (near)..... | 93 A | xiii |
| work by, Mesabi range.. 159 A | xv | | Lutterworth tp..... | 57 B | xiii |
| and Richardson. | | | North Elmsley tp..... | 181 | R C |
| Inventors of refining process, | | | MacCue (Oliver Ferry)..... | 196 | iii |
| nickel matte..... 23, 24 | iv | | boring for..... | 59 | xi |
| co., OREGON. | | | 26, 50, 53 | xii | |
| Cobalt shipments from, to France. 61 B | xiv | | mine, closed down..... | 93 A | xiii |
| lake, MANITOU DIST, R. R. D. 87 | vi | | 22 A | xiv | |
| mica mine, LOUGHBORO' TP, | | | 106 A | xv | |
| FRONTENAC CO. | | | notes..... | 35 | vi |
| Idle, 1892..... | 249 | ii | 134, 135 | xii | |
| Notes on, 1895..... | 278 | v | output, 1905..... | 23 A | xv |
| Grantham tp., DRUMMOND CO., QUE. | | | re-opened..... | 87 A | xiv |
| Bog-iron ore in..... | 28 | ii | Occurrences of..... | 199 | ix |
| tp., LINCOLN CO. | | | 12, 92 A | xiii | |
| Carbide factory in. <i>See</i> Merrit- | | | Otter station..... | 187 | vii |
| ton. | | | Port Arthur dist..... | 58 B | xiv |
| Iroquois beach in. <i>See</i> Homer. | | | Porter inlet, Red-gut bay, Rainy | | |
| Grantley, WILLIAMSBURG TP., DUN- | | | lake..... | 86 | viii |
| DAS CO. | | | Pringle tp..... | 170 | ix |
| Limestone near..... | 40 B | xiii | Roberts bay, Muskoka dist..... | 81 B | xiii |
| Chazy..... | 47 B | xiii | Seeley Bay (near)..... | 230 | vii |
| Granulite. | | | Silver islet..... | 35 | R C |
| Composition of..... | 534 | R C | 124 | ix | |
| <i>Graphalium decurrens.</i> | | | 55 B | xiv | |
| Abitibi Lake dist..... | 242 A | xiv | Sudbury and Timagami dist..... | 168 | x |
| Graphic granite. | | | Whitefish lake, Brougham tp. | | |
| Reason for name..... | 535 | R C | discovery..... | 34 | vi |
| tellurium. <i>See</i> Sylvanite. | | | floods..... | 12, 92 A | xiii |
| Graphite. | | | notes..... | 30 | v |
| Canada, production, 1870, 1880.. 209 | R C | | 27 | xi | |
| 1886-87.. 209, 243 | R C | | 26 | xii | |
| 1888..... | 525 | R C | production, 1897..... | 23 | vii |
| Composition of..... | 166 | vi | 1898..... | 18 | viii |
| Crystallography..... | 186 | ii | prospects good..... | 14 | ix |
| Definition of..... | 535 | R C | <i>See also</i> Black Donald m. | | |
| Determination of..... | 204 | vi | paint. | | |
| and value..... | 219 | vi | Composition and uses of..... | 463 | R C |
| Exhibit of, at Pan-American | | | Grass lake, MOSS TP., TH. B. D. | | |
| Exhibition..... | 87 | xi | Notes on vicinity..... | 121 | v |
| Erzebirge, Saxony..... | 165 | vi | Route from, to Sheban Iowan lake. 125 | v | |
| analysis..... | 166 | vi | Grassett, MICHIGICOTEN DIV. | | |
| Foreign countries..... | 36, 37 | vi | Minor refs. to..... | 3, 5 Bull. | iii |
| Hardness of..... | 201 | vi | 185, 186 | vii | |
| Mining of, 1902, notes on..... | 132-134 | xii | 294 A | xiv | |
| Molybdenum, mistaken for..... | 232 | vii | Route from, to Michipicoten, | | |
| Origin of, notes by Bell..... | 13 | R C | description..... | 199, 201 | vii |
| Specific gravity of..... | 201 | vi | road, MICHIGICOTEN DIV. | | |
| Statistics of, 1898..... | 11 | viii | Rocks on S. part of, notes by | | |
| 1899..... | 13 | ix | Coleman..... | 157 | ix |
| 1900..... | 11, 12 | x | Grasshoppers. | | |
| 1901..... | 13, 27 | xi | Lac Seul, Ont..... | 62 | v |
| 1902..... | 12, 13, 26, 27 | xii | Grassy (ATINIMIKIE) bay, L. OF | | |
| 1903..... | 3, 92 A | xiii | THE WOODS, R. R. D. | | |
| 1904..... | 1, 3, 22 A | xiv | Gneiss on..... | 113 | vii |
| 1905..... | 23 A | xv | Gold mining on..... | 43 | vii |
| 1906..... | 3, 6, 25 A | xvi | lake, METHUEN TP., PETERBORO | | |
| United States, production, 1888. 525 | R C | | CO. | | |
| Apatite dists..... | 442 | R C | Corundum in syenite on..... | 211 | viii |
| Apsley (near)..... | 213 | viii | lake, SEINE RIVER, R. R. D. 60, 160 | v | |
| Bathurst tp..... | 181 | R C | portage, NICKEL LAKE, R. R. D. | | |
| Bedford tp..... | 52, 134, 181 | R C | Pyrites near..... | 175 A | xvi |
| Canonto tp..... | 203 | xi | Rocks on and near..... | 82 | iv |

| | Page. | Vol. | | Page. | Vol. |
|--|----------|------|---|----------|------|
| Grassy Portage bay, RAINY LAKE, R. D. | | | Gray Eagle gold mine, NEAR KENORA, R. R. D. | | |
| Gold mining north of..... | 55 | iv | Notes on, 1898..... | 59, 60 | vii |
| Iron ore near..... | 134, 135 | xi | Young & Sparling Co. | | |
| river, LITTLE WAHIGOON LAKE, R. R. D. | | | Operating salt..... | 185 | R C |
| Geological description..... | 178 | vi | 1899..... | 111 | ix |
| Glacial striae on..... | 181 | vi | 1902..... | 38 | xii |
| Gold mining on, 1900..... | 97 | x | 1903..... | 22 A | xiii |
| Minor ref. to..... | 121 | vii | 1906..... | 23 A | xvi |
| river, MATTAGAMI RIVER, ALG. | | | Goose island, MOOSE RIVER, ALG. | | |
| Description of..... | 127, 128 | ix | 194 | viii | |
| Log-jams on..... | 130 | ix | Graywacke. See Greywacké. | | |
| Timber along..... | 176 | vi | Great Beaver lake, W. OF MATTAGAMI LAKE. See Mesomekenda lake. | | |
| Graton, L. C. | | | Britain. | | |
| Report by, on explorations up and down the Mississagi river. | 157-172 | xii | Armour plates used by..... | 158, 159 | iii |
| ref. to..... | 5 | xii | See also British Admiralty. | | |
| Grattan tp., RENFREW CO. | | | "Balance of trade" against, 1868-1886..... | 397 | R C |
| Iron in, boring for..... | 59 | x | Business depression in, 1890-91, affects mining..... | 8 | i |
| mining, by Canada Iron Furnace Co..... | 24 | xi | Canadian exports to, 1881-87..... | 244-254 | R C |
| See also Radnor iron m. | | | Cement imports from Canada: | | |
| Sphene in. See Eganville. | | | 1899-1900..... | 15 | x |
| Grave lake, McCANN TP., NIP. | | | 1901..... | 33 | xi |
| Description of..... | 110 A | xiii | 1902-1903..... | 34, 35 | xii |
| Minor ref. to..... | 248 A | xiv | Coal from, for Ontario..... | 196 | ii |
| Rocks near..... | 249 A | xiv | Cobalt purchasers in, terms of .. | 11 A | xvi |
| Gravel. | | | Copper production of, 1860, 1887..... | 371 | R C |
| Canadian exports of, 1881-87..... | 245 | R C | Emery imports of, 1901..... | 38 | xi |
| Bay Mining Company. | | | Foreign trade of, 1894..... | 8 | iv |
| Capital and date of charter..... | 9 | vii | Geological Survey of, prevents fruitless search for coal..... | 409 | R C |
| pits. | | | Iron and steel in: | | |
| Davenport..... | 229 A | xiii | consumption, <i>per cap.</i> , 1888 ... | 369 | R C |
| Finch, fossils from and section of. | 217, 218 | x | exports to U.S., 1887..... | 469 | R C |
| Garden River (near)..... | 197 | viii | industry, 1854..... | 365 | R C |
| Gladstone..... | 227 | x | 1888..... | 366 | R C |
| Lyn..... | 221 | x | 1892..... | 120-122 | ii |
| Newington..... | 227 | x | reason of success..... | xvi | R C |
| Ottawa and N.Y. R'y, fossils from. | 218 | x | prices, 1860-1890..... | 84 | ii |
| Owen Sound, photo..... | 27 B | xv | production, 1888..... | 223-224 | R C |
| Peninsula..... | 111 | vi | various years..... | 460 | R C |
| Trenton (near), photo..... | 224, 225 | x | smelting, history of..... | 360-368 | R C |
| river, MISSISSAGI RIVER, L. HURON. | | | reduction of cost..... | 483 | R C |
| Character..... | 163 | xii | treatment..... | 87, 88 | ii |
| Gravell, A. | | | Mineral exports to, (Ont.) 1869-1888..... | 211 | R C |
| 116 | ix | | Mining lands in, notes on tenure of..... | 226 | ii |
| 48 A | xiii | | laws of..... | 285, 286 | R C |
| Graves island, L. SIMCOE. | | | royalties in, extracts from report by the Commission on..... | 15-47 | i |
| Trenton limestone on..... | 89 B | xiii | schools in..... | 491-494 | R C |
| Gray, A. M. | | | Nickel exports to, 1890-94..... | 177 | iv |
| 141 | x | | Peat industry in, notes on..... | 187-189 | i |
| J. M..... | 81 | viii | Roads in, superiority of..... | 103 | iii |
| John F..... | 61 | ix | Devon Consols, TAVISTOCK, ENG. | | |
| S. H..... | 103 | vii | Arsenic mining in..... | 101 | xi |
| William | | | Granite Gold Mfg. and Dev. Co. | | |
| Evidence by, <i>re</i> free salt..... | 236 | R C | Capital and date of charter..... | 9 | vii |
| salt making..... | 187 | R C | Work by, 1898..... | 68 | viii |
| Log of salt wells at Blyth and Wingham given by..... | 184, 185 | R C | 1899..... | 47, 59 | ix |
| W. P. | | | 1900..... | 89 | x |
| Iron mining by, N. of Batchawana bay..... | 190 | x | | | |
| and Scott. | | | | | |
| Salt well of, Kincardine, log of..... | 184 | R C | | | |

| | Page. | Vol. | | Page. | Vol. |
|--|----------|--------|--|----------|--------|
| Great lake, MICHIGICOTEN DIV., ALG. | | | Green, John | | |
| Country in vicinity of..... | 201 | A xv | Gold mining by, Seine River dist. | 227 | iv |
| Minor ref. to..... | 179, 200 | A xv | | 75 | vii |
| Rocks on and near..... | 202, 205 | A xv | Philip | | |
| Iron formation..... | 204 | A xv | Silver mining by, Bucke tp..... | 7 | A xv |
| Lake George, NORTHWEST OF L. | | | Walter D. | 49 | A xiv |
| Huron, Alg. | | | William | 48-50 | x |
| Rocks on and near. 124, 158, 159, 162, 169 | | viii | bay, BOBS LAKE, FRONTENAC CO. | | |
| Lakes, The | | | Limestone on..... | 46 | ii |
| Changes in level of: | | | carbonate of copper. See | | |
| causes..... | 137 | vi | Malachite. | | |
| notes by Gibson..... | 102 | iv | island, L. HURON | 80 | B xiii |
| Miller..... | 226 | x | island, MOIRA LAKE, HASTINGS | | |
| Early mining on..... | 255 | R C | Co. | | |
| Lakes Copper Co. | | | Garnet on..... | 198 | ix |
| Capital and date of charter..... | 10 | ix | Rutile on..... | 208 | ix |
| Exhibits of, at Pan-American | | | lake, ROSS TP., RENFREW CO. | | |
| Exhibition..... | 86 | xi | Marl on..... | 122 | A xiv |
| Iron mining by, Hutton tp.. 177, 178 | | x | Green-Meehan Mining Co. | | |
| Not included in International | | | Capital and date of charter..... | 28 | A xvi |
| Nickel Co..... | 22 | xi | Green mt., U.S. | | |
| Work by, Blezard tp..... | 98, 99 | ix | Undulations in strata of..... | 5 | R C |
| | 123, 124 | x | vitriol. See Melanterite. | | |
| | 254, 282 | xi | river, ERAMOSA TP., WELLING- | | |
| Lakes Portland Cement Co. | | | ton Co. | | |
| Capital and date of charter..... | 28 | A xvi | Marl from, analysis..... | 122 | B xiii |
| Limestone, The, ENGLAND. | | | Rock Mining Co. | | |
| Galena in..... | 173 | i | Capital and date of charter..... | 29 | A xvi |
| Manitou island. See Newman | | | Greenalite. | | |
| island and Manitou islands. | | | Difference between, and glaucon- | | |
| Miami river, OHIO. | | | ite..... | 164 | A xv |
| Cincinnati group on..... | 116 | i | Greenfield, John (1850) | 174, 178 | ii |
| Northern Countrie G. Mg. Co. | | | Greenhill portage, MISSISSAUGI RIVER, | | |
| Capital and date of charter..... | 10 | ix | ALG..... | 195 | viii |
| Northern diver. See Loon. | | | Greening, S. O. | | |
| Northern Mg. Exp'n and Dev. | | | Gold mining by, the New Klon- | | |
| Co. | | | dike..... | 74 | viii |
| Capital and date of charter..... | 7 | vi | Greenland. | 102 | x |
| | 13 | vii | Archaean rocks of..... | 7 | R C |
| Gold prospecting by, Capreol tp. 151 | | x | | 104 | iv |
| Wawa, near..... | 194 | vii | | 245 | v |
| Licence to..... | 116 | ix | Nickel on coast of..... | 151 | C xiv |
| | 141 | x | Greenlaw, BERWICKSHIRE, SCOTLAND. | | |
| Work by, 1897..... | 100 | vii | Peat bogs in, notes..... | 187 | i |
| 1898..... | 102, 145 | viii | Greenock tp., BRUCE CO. | | |
| Northern Oil and Gas Co. | | | Corniferous formation in..... | 46 | R C |
| Capital and date of charter..... | 38 | A xiii | Greens creek, OTTAWA. | | |
| Northwest Mg. Co. | | | Fossils from..... | 224-226 | x |
| Capital and date of charter..... | 9 | xii | Leda clay on..... | 215 | x |
| Operating Indian Joe mine..... | 94 | xii | Greenshields, J. B. | | |
| Great Northwest mine..... | 62 | A xiii | Director, Marmora Foundry Co. | 21 | ii |
| Pike lake, TATAUCHAPIKA | | | Greenstone. | | |
| RIVER, ALG..... | 128 | ix | See also Gros Cap greenstone. | | |
| Pyramid, The | | | Bruce Mines (near), photo... 136, 137 | | viii |
| Mortar in, character of..... | 12 | B xiii | Bucke tp., photo..... | 42, 43 | B xiv |
| Wheat Busy mine, CHACE- | | | Chevey mine, Mississagi river... 170 | | xii |
| WATER, ENG..... | 111 | xi | Definition of..... | 535 | R C |
| "Great Western" ss. | 203 | i | Great Huronian Belt, notes by Bell. 75 | | i |
| Greece. | | | Larder lake, notes by Brock... 207 | | A xvi |
| Corundum and emery in..... | 62 | vi | photos..... | 209, 211 | A xvi |
| | 217 | vii | Loon lake, Th. B. d., notes..... | 255 | A xiv |
| | 241 | viii | Michipicoten div., petrography. 178 | | xi |
| Historical notes..... | 167 | i | Sudbury dist., distribution..... 78-84 | | C xiv |
| Greeg-? | 246 | iv | McKinn tp., photo. 51 | | C xiv |
| Green, Albert | 30, 31 | ix | | | |
| Andrew | 127 | xi | | | |
| Edward T. | | | | | |
| Agreement between, and Provin- | | | | | |
| cial Natural Gas Co..... | 132 | i | | | |

| | Page. | Vol | | Page. | Vol |
|---------------------------------------|----------|--------|--|----------|--------|
| Greenwater lake, SHEBANDOWAN | | | Grey tp., HURON CO. | | |
| LAKE DIST. | | | Marl in..... | 162 | A xiv |
| Beauty of..... | 203 | V | Greywacke. | | |
| Description of..... | 126 | V | Animikie iron range, petrographi- | | |
| Iron ore on..... | 126, 127 | V | cal notes..... | 159 | A xv |
| associated with jasper..... | 309 | xii | As a building-stone..... | 93 | i |
| notes by Coleman..... | 163 | ix | Bucke tp., photo..... | 37 | B xiv |
| Greenwood, Joseph | 81 | V | Definition of..... | 535 | R C |
| Gold prospecting by..... | 71 | viii | Huronian areas..... | 73, 74 | i |
| Killed..... | 43, 50 | X | notes by Bell..... | 20 | R C |
| R. AND J. W. | | | Loon lake, Th. B. d., notes..... | 255 | A xiv |
| Gas wells of..... | 44 | xi | Sudbury dist., distribution and | | |
| Thomas | 18 | ix | notes..... | 88-92 | C xiv |
| avenue, TORONTO. | | | petrographical notes, 289, 290 | xii | |
| Brick works on, notes and photos. | | | Wanapitei Lake reg., petrography. | 150 | vii |
| 48, 108-110 | B XV | | conglomerate. | | |
| clay for, analysis..... | 8 | B XV | Ramsay lake, Sudbury..... | 8, 93 | C xiv |
| furnace, NEAR MARQUETTE, U. S. | | | petrography..... | 129 | C xiv |
| Fuel for..... | 479 | R C | slate. | | |
| Greer, John | 269 | V | Coleman tp., analysis..... | 48 | B xiv |
| Grenville canal, GRENVILLE CO. | | | Gribble, Charles | 207 | iv |
| Stone for, from Ross quarry.... | 99 | B xiii | Griendtveen Moss Litter Co. | 34 | A xiii |
| co. | | | Grierson, W. | 103 | viii |
| Brick yards in, notes..... | 65 | B XV | William | | |
| Limestone in, notes by Miller.... | 48 | B xiii | Iron mining by, 1867, at Gros | | |
| Palaeozoic rocks in..... | 22 | B xiii | Cap..... | 145, 254 | viii |
| Hastings unconformity. | | | Griffin, —? | | |
| Paper on, by Miller and Knight. | | | Dynamite manufactured by. | | |
| 221, 222 | A xvi | | Brockville tp. | 152 | A xvi |
| series. (or Hastings series.) | | | A. D. See Griffin mill. | | |
| Deposition of..... | 150 | A xvi | P. H. | 17 | ix |
| Gold belt of, Eastern Ontario.... | 187 | xi | 30 | X | |
| Hastings dist..... | 208, 209 | vii | P. S. | 59 | ix |
| 208, 244 | viii | | mill. | | |
| Notes on, by Bell..... | 11 | R C | Description and sketch of..... | 129 | A xiv |
| Perry tp..... | 172 | ix | Griffis, Silas | 58 | ix |
| Timagami dist..... | 162 | X | Griffith island, GEORGIAN BAY, L. | | |
| tp., ARGENTEUIL CO., QUE. | | | HURON. | | |
| Calcareous formation in..... | 47 | B xiii | Lighthouse on, limestone for.... | 49 | B xiii |
| Peat in..... | 198 | ii | tp., RENFREW CO. | | |
| Grey, Noah W. | 271 | xi | Limestone in..... | 101 | B xiii |
| and Bruce Oil and Gas Co. | | | Nepheline-syenite in..... | 224 | viii |
| Capital and date of charter..... | 21 | X | Griffiths, S. J. | 95 | xii |
| 11 | xi | | Grigg, Jonathan | 124 | X |
| Gas struck by, at Hepworth.... | 45 | xi | Grills, John J. | 116 | A XV |
| Log of gas well of..... | 109 | A XV | Grimsby, GRIMSBY TP., LINCOLN CO. | | |
| Portland Cement Co. | | | Iroquois beach at..... | 228 | A xiii |
| Analysis of clay and marl used by. | 183 | A xiv | Limestone quarrying near..... | 97 | i |
| Capital and date of charter..... | 9 | X | Notes and analysis..... | 74, 75 | B xiii |
| Daily capacity of cement outpnt. | 18 | B xiii | Gold Mining Co. | | |
| Notes on, 1905..... | 141, 142 | A xiv | Capital and date of charter..... | 9 | vii |
| Operating, 1901..... | 33 | xi | Work by, 1897..... | 175 | vii |
| 1902..... | 31, 35 | xii | Quarry Co. | | |
| 1903..... | 17 | A xiii | Limestone of, analysis..... | 75 | B xiii |
| 1905..... | 17 | A XV | quarries..... | 74 | B xiii |
| 1906..... | 20 | A xvi | Minor ref. to..... | 97 | i |
| antimony. See Stibnite. | | | Grimsthorpe, CAMPBELL TP., ALG. | | |
| co. | | | Actinolite in..... | 91 | iii |
| Brick yards in, notes..... | 65, 66 | B XV | Galena in..... | 198 | ix |
| Cement industry in, 1902.... | 31, 32 | xii | Talc in..... | 99 | iii |
| Iron ore in..... | 43 | R C | analysis..... | 101 | iii |
| Limestone in, notes by Miller.... | 48 | B xiii | Mg. Co. | | |
| Medina shale in, thickness..... | 43 | R C | Capital and date of charter..... | 37 | A xiii |
| Terraces on shores of..... | 176, 177 | ix | tp., HASTINGS CO. | | |
| copper. See Tetrahedrite. | | | Actinolite in..... | 192 | ix |
| siding, NEAR TIMAGAMI, NIP. | | | 27 | xi | |
| Arsenic at..... | 74 | A xvi | Steatite in..... | 210 | ix |
| mining. See Big Dan mine. | | | Talc in..... | 210 | ix |
| Little Dan mine. | | | 205 | xi | |

| | Page. | Vol. | | Page. | Vol. |
|---|----------|--------|--|----------|--------|
| Grindstone. | | | Grouse, ruffed | | |
| Canadian production, 1886-7.... | 243 | R C | Abitibi dist. | 126 | A xiii |
| Duty on, into U. S. | 228 | R C | | 243 | A xiv |
| island , L. ONTARIO, U. S. | | | Grover, M. B. | 116 | ix |
| Beaches on..... | 242 | A xiii | | 141 | x |
| Granite quarrying on..... | 296, 297 | xi | | 74 | xi |
| pt. , L. SUPERIOR, ALG. | | | Gruenerite schist. | | |
| “Arcadia” wrecked at..... | 189 | A xv | Michigan, U. S..... | 151, 162 | ix |
| Griqualand, S. AFRICA. | | | Michipicoten div..... | 184 | xi |
| Diamonds in..... | 123 | ix | Grumbine, S. | 48 | A xiii |
| Griswold, C. T. | 64 | A xvi | <i>Grus americana.</i> See Crane, white | | |
| Grit. | | | <i>Gryphula galeata.</i> | | |
| Definition of..... | 535 | R C | Kwataboahagan river..... | 186 | A xiii |
| Grosbeck, Alex. J. AND C. C. See | | | Guanacevi, DURANGO STATE, MEXICO. | | |
| Boerth Mining Co. | | | Cobalt minerals in..... | 71 | B xiv |
| Groggery. See Saloons. | | | Guano beds. | | |
| Gron dal, G. | | | Peru, apatite in..... | 441 | R C |
| Ref. to work by, on iron ore, Pit- | | | Gudewill, George | 30 | x |
| karanta, Finland..... | 338 | xii | Gueguin, Rev. Father | | |
| Separator of. See next ref. | | | Views of, on land east of Moose | | |
| Delvick separator. | | | River basin..... | 204 | v |
| Description of..... | 329 | xii | Guelph and Kelso. | 28 | xii |
| Gros Cap, L. SUPERIOR. | | | Guelph, WELLINGTON CO. | | |
| Beaches from, to C. Gargantua. 153, 155 | viii | | Bore-hole record at..... | 150 | xii |
| Cupiferous amygdaloids at..... | 67 | R C | | 123 | B xiii |
| Description of..... | 153 | xi | Flora of..... | 241 | A xiv |
| Iron ore at..... | 23 | R C | Guelph formation in..... | 45 | R C |
| analysis..... | 56 | ii | 33, 120, 121 | B xiii | |
| hematite..... | 64 | ii | analysis..... | 122 | B xiii |
| mining..... | 68 | R C | named after..... | 44 | R C |
| | 145 | viii | Iron works at..... | 329 | R C |
| Rock at and near .126, 164, 168, 171 | viii | | Lime-kilns at..... | 14 | A xiii |
| 156-161, 165, 183 | xi | | photo..... | 126, 127 | B xiii |
| ferruginous chert..... | 317 | A xiv | Meteorological observations at. 129, 130 | A xiii | |
| greenstone..... | 178 | xi | 149, 239 | A xiv | |
| | 114 | A xvi | Natural gas piped to..... | 23, 108 | A xv |
| Keweenawan..... | 39, 67 | R C | 25 | A xvi | |
| schist-conglomerate..... | 144 | viii | R. C. cathedral at, photo . . . | 126, 127 | B xiii |
| trap..... | 15 | v | Sand, gravel and clay deposits | | |
| greenstone. | | | near..... | 142, 149 | xii |
| Description and distribution. 155, 156 | xi | | Acetylene Gas Machine Co. | 20 | vii |
| Goetz claims, Michipicoten div.. | 181 | A xv | formation. | | |
| Notes on, by J. M. Bell.... | 300, 301 | A xiv | Composition of..... | 98 | A xiv |
| Petrography of..... | 180, 181 | xi | Distribution and character.... | 44, 45 | R C |
| Position of, in Huronian..... | 174 | A xv | East Tilbury tp..... | 103 | A xvi |
| Ground-hog. | | | Manitoulin island..... | 93 | i |
| Abitibi dist..... | 253 | A xiv | Oil in, yield promising..... | 23 | A xvi |
| Groundhog lake, GROUNDHOG RIVER, | | | Position of, in Silurian..... | 2 | R C |
| ALG. | | | Romney tp..... | 25 | A xiii |
| Barley grown at..... | 115 | iv | Seaforth..... | 54 | R C |
| river, ALG | | | Thickness of, in oil fields..... | 96 | A xiv |
| Description of..... | 133 | ix | Mining and Development Co. | | |
| Huronian on..... | 18 | R C | Capital and date of charter..... | 10 | ix |
| Iron ore on..... | 9 | A xiii | Licence to..... | 116 | ix |
| notes by Miller..... | 315 | xii | 74 | xi | |
| Route to, from Minniesinaqua | | | 66 | xii | |
| lake..... | 130, 131 | ix | Work by, 1899..... | 113 | ix |
| Soil and timber along..... | 114 | iv | tp., WELLINGTON CO. | | |
| | 177 | A xiii | Limestone in..... | 120 | B xiii |
| Waterpower on:..... | 142 | ix | quarries and kilns..... | 122 | B xiii |
| Group. | | | Guernsey, F. W. | 76 | vii |
| Definition of term..... | 3 | R C | Guerton, Charles | 292 | xi |
| Grouse. | | | Guess, H. A. | | |
| Lake of the Woods..... | 120 | vii | Assayer, Keewatin Reduction | | |
| Canada | | | Works..... | 99 | viii |
| Abitibi dist..... | 126 | A xiii | Manager, for Ottawa Gold Mg. & | | |
| | 243 | A xiv | Milling Co. 90, 101, 102 | x | |
| | | | Sakoose g. m..... | 255 | xi |
| | | | Scotty Island g. m. | 42 | ix |
| | | | Yum-Yum g. m.... | 58 | ix |

| | Page. | Vol. | | Page. | Vol. |
|---|----------|--------|--|-------|-------|
| Guest and Hendric. | | | Gunflint lake, TH. B. D.—<i>Con.</i> | | |
| Limestone quarrying by, Ancaster. 142 | xii | | Iron, prospecting for..... 67 | ii | |
| | 125 | B xiii | reason for magnetic prop- | | |
| Guggenheim, Messrs. | | | erties..... 53 | ii | |
| Option held by, on Nipissing mines. 14 | A xvi | | Map of, sketch..... 126 | R C | |
| Guillaume, Charles E. | | | Railway to, from Port Arthur, | | |
| Ref. to work by, on nickel..... 115 | viii | | projected..... 207 | R C | |
| Guinard gold mine, KALADAR TP., | | | Gunn, Alexander..... 133 | x | |
| LENNOX CO. | | | D. A..... 66 | xii | |
| Ore of, value..... 28 | R C | | Gunnison co., COLORADO, | | |
| Guinea Gold and Copper Mg. Co. | | | Smaltite from, analysis..... 71 | B xiv | |
| Capital and date of charter..... 10 | ix | | Gunpowder. | | |
| Guise, Jarvis..... 32 | A xv | | Peat for, in lieu of charcoal..... 215 | ii | |
| Gull. | | | Gunter pyrites mine, CASHEL TP., | | |
| Abitibi river, north of..... 189 | xii | | HASTINGS CO. | | |
| Little Abitibi lake..... 188 | viii | | Notes on, by Fraleck..... 163 | A xvi | |
| L. Superior, Corbeau pt..... 128 | viii | | Gurd, A. T. | | |
| Leach island..... 131 | viii | | <i>See also</i> Gurd and Kippin. | | |
| White Spruce har- bour..... 134 | viii | | Boring by, for oil, Raleigh tp... 40-42 | xii | |
| Rainy Lake dist..... 97 | iv | | | 90 | A xiv |
| American herring | | | | 112 | A xiv |
| Abitibi dist..... 126 | A xiii | | Gurd and Kippin..... 24 | vi | |
| island, L. OF THE WOODS, | | | tp., P. S. D. | | |
| R. R. D. | | | Petrography of rock from. <i>See</i> | | |
| Gold mining on..... 37 | vii | | Commenda. | | |
| lake, FRONTENAC CO. | | | Gustavson, Eric..... 32, 33 | vii | |
| Conglomerate on..... 202 | xi | | Guthrie, John..... 49 | xi | |
| lake, LUTTERWORTH TP., HAL- | | | Prof..... 492 | R C | |
| BURTON CO. | | | Guyitt, Walter..... 124 | i | |
| Crystalline limestone E. of; silver | | | Gwillimbury, E. tp., YORK CO. | | |
| mining on (local tradition)... 57 | B xiii | | Artesian water in. <i>See</i> Holland | | |
| lake, MICHIGICOTEN DIV., ALG. | | | Landing. | | |
| Country around, character..... 153 | xi | | Gwynne & Co. | | |
| lake, NEAR WENEBEGON LAKE, | | | Peat-drying process of..... 193 | | |
| ALG..... 167 | xii | | Gypsum. | | |
| (Kioskwabic) lake, WEST OF | | | <i>See also</i> Selenite. | | |
| KAPISKASING LAKE, ALG. 137, 138 | ix | | Annaberg, Saxony..... 61 | B xiv | |
| lake, WHITE-CLAY RIVER, ABI- | | | As a substitute for marble..... 279 | vi | |
| TIBI RIVER. | | | Canada, production, 1870, 1880, | | |
| Notes on, by Bolton..... 184 | xii | | 1887..... 209 | R C | |
| river, VICTORIA CO. | | | 1880-87... 243 | R C | |
| Waterpower on..... 33 | xii | | 1888..... 525 | R C | |
| | 17 | A xiii | Composition of..... 119 | R C | |
| | 18 | B xiii | Definition of..... 535 | R C | |
| | 157 | A xiv | 240 | i | |
| Gum, chewing <i>See</i> Chewing gum. | | | Determination of..... 205, 222 | vi | |
| Gummite. | | | Evidence <i>re</i> before Roy. Com. 121, 122 | R C | |
| Annaberg, Saxony..... 61 | B xiv | | Hardness of..... 201 | vi | |
| Gun(s). | | | Industry of, 1890..... 110-114 | i | |
| Nickel-steel for, notes by Jaques. | | | 1900..... 23, 24 | x | |
| | 139-141 | ii | Mining of, Inspector's report for:— | | |
| Statistics, 1881..... 116 | ii | | 1891..... 240-247 | i | |
| Wire, made at Birdstown..... 118 | ii | | 1892..... 252-254 | ii | |
| Gun cape, BRUCE CO. | | | 1893..... 196-199 | iii | |
| Clinton formation at..... 35 | B xiii | | 1894..... 250-252 | iv | |
| Gunflint lake, TH. B. D. | | | 1895..... 280-283 | v | |
| Animikie formation on..... 32 | R C | | 1896..... 278-280 | vi | |
| | 76 | ii | 1897..... 99, 100 | vii | |
| | 237 | iv | Nomenclature and origin... 119, 120 | R C | |
| | 24 | xi | Occurrences of..... 199 | ix | |
| | 8 | A xiii | Paris, France..... 119 | R C | |
| Iron ore on and near..... 22, 144 | R C | | Specific gravity of..... 201 | vi | |
| | 123 | iv | Statistics, 1870, 1880..... 210 | R C | |
| | 309, 310 | xii | 1881-1887... 243, 244 | R C | |
| exhibited at World's Fair. 82 | ii | | 1888..... 72 | R C | |
| Mesabi range..... 65 | ii | | 1891..... 6 | i | |
| notes by Conmee..... 68 | iii | | 1892..... 7, 11 | ii | |
| Sedgwick.. 126, 127 | R C | | 1893..... 7, 10 | iii | |
| | | | 1894..... 11 | iv | |

Gypsum.—*Con.*

| | Page. | Vol. |
|-------------------------------------|--------------|--------|
| Statistics. — <i>Con.</i> | | |
| 1895 | 11, 20 | v |
| 1896 | 13, 33 | vi |
| 1897 | 15, 24 | vii |
| 1898 | 11, 17 | viii |
| 1899 | 12, 13 | ix |
| 1900 | 11, 12, 23 | x |
| 1901 | 13, 37 | xi |
| 1902 | 12, 13, 38 | xii |
| 1903 | 3, 4, 21 | A xiii |
| 1904 | 1, 3, 22 | A xiv |
| 1905 | 1, 4, 24 | A xv |
| 1906 | 25 | A xvi |
| Sulphur associated with | 22 | A xvi |
| United States, production, 1888 .. | 525 | R C |
| Sandusky | 120 | R C |
| | | |
| Essex co., in Onondaga formation .. | 115 | A xiv |
| French river | 190-193 | viii |
| Grand river | 45, 121, 122 | R C |
| production, 1905 | 21 | A xiii |
| 1906 | 24 | A xv |
| Caledonia (near) | 252 | iv |
| mining | 38 | xii |
| notes by Johnston | 122 | R C |
| See also Garland gyp. m. | | |
| Desbarats (near) | 269 | xi |
| E. Tilbury tp., thickness | 103 | A xvi |
| unsafe condition | 4 | i |
| Gypsum mt. | 158 | A xiii |
| Haldimand co., Onondaga forma- | | |
| tion, notes on | 51, 52 | B xiii |
| Harricanaw river | 158 | A xiii |
| Missinaibi river | 178 | i |
| Moose river | 45, 69 | R C |
| 178 | i | |
| 194 | viii | |
| 137, 156, 157 | A xiii | |
| 32 | B xiii | |
| map showing | 155 | A xiii |
| notes by Gibson | 127 | iv |
| photos. | 160, 161 | A xiii |
| Onondaga formation | 178 | i |
| Paris, near | 121 | R C |
| 21 | A xiii | |
| 34 | B xiii | |
| borings for | 27, 28 | A xv |
| early history | 113, 114 | i |
| notes by Parks | 147 | xii |
| mt., ALG.-NIP. BOUNDARY LINE. | | |
| Description of | 146, 158 | A xiii |
| Gypsum on | 158 | A xiii |
| Minor ref. to | 138 | A xiii |
| <i>Gyroceras</i> . | | |
| St. Marys, near | 96 | B xiii |
| " <i>cyclops</i> . | | |
| St. Marys | 152 | xii |
| " <i>numa</i> . | | |
| Anderdon tp. | 125 | xi |
| Gysser, —? | | |
| Peat process invented by | 193 | i |

H 1 gold loc. See Huronian gold mine.

H 2 gold loc. See Highland gold mine.

| | Page. | Vol. |
|---|-------------|--------|
| H 3 gold loc. See Neebish gold mine. | | |
| H 7, 8 gold locs. See Shebandowan gold mine. | | |
| Haanel, Dr. Eugene | 144 | C xiv |
| Haast, Sir Julian von | 520 | R C |
| <i>Habenaria bracteata</i> . | | |
| Abitibi Lake dist. | 211 | A xiv |
| " <i>dilatata</i> . | | |
| Abitibi Lake dist. | 241 | A xiv |
| " <i>hyperborea</i> . | | |
| Abitibi Lake dist. | 241 | A xiv |
| Mattagami valley | 150 | A xv |
| " <i>obtusata</i> . | | |
| Mattagami valley | 150 | A xv |
| " <i>orbiculata</i> . | | |
| Mattagami valley | 150 | A xv |
| " <i>psycodes</i> . | | |
| Mattagami valley | 150 | A xv |
| Habermahl, F. | | |
| Experiments by, on pyrrhotite .. | 164 | ii |
| Hackberry, Iowa. | | |
| Fossils from | 183, 184 | A xiii |
| <i>Hadena</i> . See Cut worms. | | |
| Hadfield, R. A. | | |
| Speech by, re Mond nickel process .. | 119 | viii |
| Hafod. | | |
| Copper smelting at | 375 | R C |
| Hagarty tp., RENFREW CO. | | |
| Allanite in | 193 | ix |
| Cambro-Silurian in. See Killaloe wharf, S. BURGESS TP., LEEDS CO. | | |
| Mica mining near | 194 | iii |
| Hagedorn, C. K. | 116 | ix |
| Hagerman tp., P. S. D. | | |
| Country north of, character ... | 169 | ix |
| Limestone in | 93, 94 | B xiii |
| Hagersville, ONEIDA TP., HALDIMAND CO. | | |
| Corniferous formation at | 25 | B xiii |
| Limestone at, analysis | 54, 55, 118 | B xiii |
| quarry, notes | 55 | B xiii |
| Lower Helderberg formation near .. | 153 | xii |
| analysis | 152 | xii |
| Contracting Co. | | |
| Limestone quarrying by | 55 | B xiii |
| Light and Fuel Co. | | |
| Exhibits of, at Buffalo | 25 | A xv |
| Haight, George | 22, 23 | vi |
| Haileybury, BECKE TP., NIP. | | |
| Clay near, photo of cutting in ... | 33 | B xiv |
| 18 | B xv | |
| Saugeen | 20, 21 | B xv |
| Geology of vicinity, by Miller .. | 96-102 | A xiii |
| Headquarters, Timiskaming Mts. | | |
| div. | 38 | A xv |
| Iron ore near | 12 | A xiv |
| Limestone at | 85 | B xiii |
| analysis | 87 | B xiii |
| quarries | 83 | B xiii |
| Mineral discoveries near | 59 | A xiii |
| Mining class at, 1904 | 37, 40 | A xiv |
| 1905 | 43 | A xv |
| 1906 | 49, 51 | A xvi |
| Recorder's office at | 36 | A xvi |
| Population of, 1904 | 40 | A xiv |
| Position of | 96 | A xiii |
| Wharf at, photo | 24 | B xiv |

| | Page. | Vol. | | Page. | Vol. |
|---|------------------|--------|---------------------------------------|---------------|--------|
| Hainsworth Steel Co. | 119 | ii | Hall, Prof. James | | |
| Hair-springs. | | | Iroquois beach recognized by, in | | |
| Price per ton..... | 354 | R C | N. Y. | 225 | A xiii |
| Haldimand co. | | | Views of, on Upper Laurentian. 10, 11 | | R C |
| Gas in..... | 6 | i | John Francis | | |
| notes, 1890..... | 128 | i | Experiments by, with nickel | | |
| by Corkhill, 90, 91, 105, | 106 | A xiv | steel..... | 382, 386, 387 | R C |
| number of wells producing.. | 39 | xii | | 140 | ii |
| | 25 | A xvi | | 165 | C xiv |
| Limestone in, Corniferous..... | 25 | B xiii | Lewis A. | 66 | ix |
| notes by Miller.. | 51 | B xiii | M. J. F. | 178 | C xiv |
| Natural Gas Co. | | | N. B. | 72, 74 | viii |
| Capital and date of charter..... | 25 | A xv | | 80 | ix |
| tp., NORTHUMBERLAND CO. | | | | 141 | x |
| Beaches in. See Grafton. | | | Peleg | 141 | vi |
| Hale, C. W. | | | R. J. | 100 | x |
| Gold mining by, The New Klon- | | | Richard | 49 | ix |
| dike..... | 78 | vii | W. | 116 | ix |
| | 74 | viii | | 141 | x |
| gold mine, THE NEW KLON- | | | | 74 | xi |
| DIKE, R. R. D. | 42 | viii | William | | |
| Halenia deflexa | | | Mellwraith pyrites mine found | | |
| Abitibi Lake dist..... | 241 | A xiv | by..... | 153 | A xvi |
| Mattagami valley..... | 150 | A xv | G. B. & Co. | | |
| Hales, H. | | | Radnor Forges blast furnace | | |
| Brick yard of, Bridgen..... | 74 | B xv | worked by..... | 25 | ii |
| Haley station, ROSS TP., RENFREW CO. | | | John & Co. | 119 | ii |
| Apatite in..... | 53, 170 | R C | Hallam tp., ALG. | | |
| Marble quarried at..... | 11 | B xiii | Pulp mills in. See Webbwood. | | |
| Half-breeds. | | | Halland prov., SWEDEN. | | |
| Rainy Lake dist., characteristics. | 98 | iv | Peat in..... | 219 | ii |
| Halfway pt., L. NUNGOX, TH. B. D. | | | Hallat, H. | | |
| Rocks at..... | 132 | A xvi | Brick yard of, Comber..... | 63 | B xv |
| Haliastur leucocephalus. See Eagle, bald | | | Halleck, James | | |
| Haliburton, DYSART TP., HALIBUR- | | | Iron prospecting by, Mississagi | | |
| TON CO. | | | river..... | 162 | xii |
| Blast furnace in, proposed..... | 395 | R C | Halleflinta. | | |
| Iron mining in..... | 234 | R C | Finmark (near), auriferous..... | 87 | v |
| co. | | | Matawin River dist..... | 82 | v |
| Apatite in..... | 173 | R C | Halliday, David. | 98 | A xvi |
| Geology of, notes by Miller.. 186-207 | | xi | John | | |
| Iron ores of, evidence before R.C. | 53, 130-132, 388 | R C | Gold mining by, Michipicoten | | |
| | 233 | vii | div..... | 101, 136 | vii |
| Limestone in, notes by Miller.. | 56 | B xiii | | 103 | viii |
| Marble in..... | 83 | R C | Hally, James | | |
| Mining Co. | | | Peat process of..... | 206 | ii |
| Capital and date of charter | 9 | vii | Halske, —? | | |
| Exhibit by, at World's Fair..... | 82 | ii | Electrolytic smelting studied by. | 156 | ii |
| Halite. | | | Halstead, S. V. | | |
| Crystals of, shown at World's | | | Gold mining by, near Rossland, | | |
| Fair..... | 187 | ii | Ont..... | 227 | iv |
| Hardness and specific gravity... 201 | | vi | | 186 | v |
| See Iso Salt. | | | Manager, Summit Lake Mg. Co. | 91 | xii |
| Halkirk tp., R. R. D. | | | | 69 | A xiii |
| Iron ores in..... | 134-136 | xi | Part owner, Scramble g. m..... | 49 | vi |
| magnetite..... | 75 | iv | | 57, 59 | vii |
| Schists in, description..... | 86 | iv | Halton co. | | |
| Survey of, ref. to..... | 40, 55 | iv | Iroquois beach in..... | 229 | A xiii |
| Hall, A. | 48 | xiii | Limestone in, notes by Miller.. | 57 | A xiii |
| C. | 116 | ix | Hamann, Adolph. | 515 | R C |
| | 141 | x | Hambly, R. C. | | |
| E. E. | | | Assistant in assay office, 1904... 33 | A xiv | |
| Manager, Garson nickel mine... 67 | A xvi | | Manager, Eldorado copper mine. | 76 | A xvi |
| Gold Standard mine . | 68 | A xiii | R. H. | | |
| H. | | | Brick making by, Bowmanville. | 61 | B xv |
| Brick yard of, Cobourg..... | 85 | B xv | Thomas. | 211, 212, 245 | iv |
| I. D. | 141 | x | William | 64 | A xvi |
| | | | Hamburg, GERMANY. | 287 | viii |
| | | | Hamel, L. | 282 | viii |

| | Page. | Vol. | | Page. | Vol. |
|--|------------|--------|---|----------|--------|
| Hamil, David | 125 | i | Hamilton bay, L. ONTARIO. | | |
| Hamilton, Frederick | | | Iroquois beach on..... | 229 | A xiii |
| Copper prospecting by, Creighton | | | Blast Furnace Co. | | |
| tp..... | 100 | ix | Bounty payments to, 1900..... | 32, 33 | x |
| H. C. | 116 | ix | Directors of..... | 46 | v |
| | 141 | x | Merged in Hamilton Steel and | | |
| | 74 | xi | Iron Co..... | 14 | ix |
| Lord George | | | <i>See also</i> Hamilton. | | |
| Notes by, on nickel-steel..... | 230 | i | formation (Devonian). | | |
| W. E. | 104 | vii | Bosanquet..... | 422 | R C |
| Hamilton, ANCASTER TWP., WENT- | | | Description..... | 25 | B xiii |
| WORTH CO. | | | Fossiliferous beds of, notes by | | |
| Altitude of..... | 232 | A xiii | Parks..... | 153, 154 | xii |
| Blast furnace at..... | 329 | R C | Kent co., thickness..... | 102, 103 | A xvi |
| | 10 | xiii | Named after Hamilton, N. Y..... | 4, 47 | R C |
| | 17 | A xiv | Nature of..... | 47 | R C |
| completed..... | 4 | v | Occurrences of..... | 25 | B xiii |
| description..... | 41-46 | v | Position of, in Devonian..... | 2 | R C |
| foundation of..... | 27 | x | Raleigh tp..... | 42 | xii |
| extension of..... | 22 | xii | Section of, in oil-fields..... | 99 | A xiv |
| inauguration of, ref. to..... | 19 | xii | Sub-divisions of..... | 99 | A xiv |
| in course of erection..... | 28, 29 | iv | Thickness of, in oil-fields..... | 96 | A xiv |
| notes on, 1896..... | 38 | vi | group (Sub-division of H. for- | | |
| 1897..... | 24, 25, 97 | vii | mation). | | |
| 1898..... | 6 | viii | Composition and thickness of..... | 99 | A xiv |
| 1899..... | 14, 101 | ix | Iron Mining Co. | | |
| photos..... | 32, 33 | v | Capital and date of charter..... | 9 | vii |
| probable effect on iron | | | Notes on work by..... | 97 | vii |
| mining..... | 7 | v | Natural Gas and Mining Co. | | |
| secured for Cobalt ores..... | 73 | B xiv | Capital and date of charter..... | 9 | vii |
| working, 1901..... | 25 | xi | Nickel mine. <i>See</i> Mitchener | | |
| Brick yard in, notes..... | 106 | B xv | mine. | | |
| Built on gravel bars..... | 238 | A xiii | Nickel Steel Co. | | |
| Distance from, to Chatham..... | 92 | A xvi | Gersdorffite on property of..... | 58 | xii |
| Electric light exhibited in, 1879..... | 140 | iv | Steel and Iron Co. | | |
| Fossils from, mammoths..... | 236 | A xiii | Award to, Pan-American Exhbn..... | 86, 89 | xi |
| Niagara formation..... | 423 | R C | Bounties paid to..... | 26 | xi |
| Flint at..... | 198 | ix | | 25 | xii |
| Gas of, compared to acetylene gas..... | 40 | v | | 11 | A xiii |
| piped to..... | 91, 106 | A xiv | | 14 | A xiv |
| | 23, 108 | A xv | Capital and date of charter..... | 11 | xi |
| | 25 | A xvi | Furnace of, building..... | 30, 31 | iv |
| Iron consumption of..... | 400 | R C | Limestone used by, notes by C. B. | | |
| Iroquois beach at..... | 227, 228 | A xiii | Fox..... | 14 | B xiii |
| notes..... | 28, 29 | B xv | Limonites melted by, from Madoc | | |
| photo..... | 28 | B xv | tp..... | 154 | A xvi |
| Kaolin at..... | 78, 86 | R C | Minor refs. to..... | 12 | A xiv |
| Lacustrine clay at..... | 28 | B xv | Notes on, 1899..... | 14 | ix |
| Limestone quarries near..... | 123 | B xiii | Officers of..... | 29 | iv |
| Medina shale at..... | 128 | iii | Output, 1905..... | 15 | A xv |
| | 7 | B xv | Producing, 1901..... | 25 | xi |
| "Mountain" at..... | 141 | xii | 1902..... | 22 | xii |
| Niagara formation at..... | 153 | xii | Work by, 1906..... | 17 | A xvi |
| | 24 | B xiii | near Calabogie, 1899..... | 103 | ix |
| Oil refinery at..... | 157 | R C | 1900..... | 129 | x |
| record of boring for..... | 112, 114 | A xv | 1902..... | 115 | xii |
| Pottery works at, notes..... | 118, 120 | B xv | tp., NORTHUMBERLAND CO. | | |
| Section from, to Courtright..... | 100, 101 | A xiv | Beaches in; brick yards in. <i>See</i> | | |
| Hamilton, MADISON CO., N. Y. | | | Cobourg. | | |
| Hamilton formation named after..... | 4, 47 | R C | Hamiltonville, W. HAWKESBURY TWP., | | |
| Acetylene Gas Machine Co. | | | PRESCOTT CO. | | |
| and Toronto Sewer Pipe Co. | | | Limestone near..... | 99 | B xiii |
| Bricks of, tests on..... | 130 | iii | Hamlin, F. | 116 | ix |
| Capital and date of charter..... | 24 | A xiii | | 141 | x |
| Clay used by, notes and analysis..... | 129 | iii | | 74 | xi |
| Evidence by, before Roy. Com..... | 86 | R C | Hammers. | | |
| Minor ref. to..... | 15 | A xiii | Indian, at Mammasee pen..... | 80 | iii |
| | | | Hammill, Dr. A. W. | 89 | vii |

| | Page. | Vol. | | Page. | Vol. |
|--|----------|--------|--|----------------|--------|
| Hammill, Edward | 60 | ix | Hankey, J. L. | 103 | viii |
| | 61 | A xiii | J. R. | 103 | viii |
| Hammond, Benjamin | 52 | A xv | Hanlan mica mine, N. BURGESS TP., | | |
| Herbert C. | 31 | v | LANARK CO. | | |
| James | | | Notes on, 1900..... | 131, 132 | x |
| Acknowledgments to..... | 47, 48 | v | 1901..... | 289 | xi |
| Distances furnished by, Shebandowan Lake dist..... | 127, 130 | v | 1902..... | 129, 130 | xii |
| Gold prospecting by, Shebandowan Lake dist. | | | 1903..... | 12, 91 | A xiii |
| 75, 76, 80, 117, 118 | | v | 1904, idle..... | 83 | A xiv |
| Iron prospecting by, Matawin range..... | 67 | ii | Hanner tp., Nip. | | |
| 128, 131, 276 | | v | Clay land in..... | 105 | C xiv |
| Shebandowan Lake dist..... | 126 | v | Gold in..... | 18 | xi |
| Litigation by..... | 92 | viii | prospecting for..... | 257 | vii |
| Manager, A. L. 282 g. m..... | 80 | ix | 152 | | x |
| 103 | | x | Sandstone in..... | 97 | C xiv |
| Hammond Reef g. m.... | 30 | vii | Slate in..... | 95 | C xiv |
| 89 | | viii | Terraces in..... | 106 | C xiv |
| Notes by, on Seine River g. m.... | 67 | vii | Hanna, Mark | 39 | vi |
| 93 | | viii | Samuel R. | 35 | A xvi |
| iron range near Green-water lake..... | 81 | v | tp., Nip. | | |
| Part owner, Gold Moose g. m.... | 244 | xi | Soil and timber in..... | 126 | A xv |
| Roy g. m..... | 42, 133 | vii | Hannah bay, JAMES BAY. | | |
| Tip-top copper m.... | 86 | ix | Description of, by Low..... | 130 | iv |
| William | | | lake, NEAR L. NIPIGON, TH.B.D. | | |
| Notes by, on Producer's Tanking Co..... | 166 | R C | Diabase on..... | 107 | A xvi |
| Gold Reef mine, SAWBILL LAKE, R. R. D. | | | Hanniford fields, THEDFORD. | | |
| Accident at..... | 30 | vii | Fossil corals from..... | 69 | B xiii |
| Battery statistics..... | 21 | viii | Hanover, BENTINCK TP., GREY CO. | | |
| Notes on, 1896..... | 51, 77 | vi | Cement works at, notes..... | 31 | xii |
| 1897... 29, 64-66, 130, 131 | | vii | Hanover, GERMANY. | | |
| 1898..... | 41, 89 | viii | Peat in, formation..... | 183 | i |
| 1899..... | 76, 77 | ix | moss-litter from.... | 212, 213 | ii |
| 1900..... | 103, 104 | x | process for drying..... | 194 | i |
| Photo of..... | 32, 33 | vii | Portland Cement Co. | | |
| mill..... | 32, 33 | x | Capital and date of charter..... | 9 | x |
| Gold Reef Mg. Co. | | | 37 | | A xiii |
| <i>See also</i> Hammond Gold Reef mine. | | | Clay and limestone used by, analysis..... | 183 | A xiv |
| Capital and date of charter..... | 9 | vii | Concrete recommended by, com-position of..... | 174 | A xiv |
| 10 | | ix | Notes on..... | 17, 31, 35 | B xiii |
| Formation of, notes..... | 76 | ix | photos..... | 142-144 | A xiv |
| Hampton, T. T. | 240 | i | Operating, 1901..... | 32 | xi |
| Hamwell, A. M. | 116 | ix | 1903..... | 17 | A xiii |
| 141 | | x | 1905..... | 17 | A xv |
| 74 | | xi | 1906..... | 20 | A xvi |
| Hancock, John | | | 61 | | A xvi |
| Brick making by, Hamilton. 106, 107 | | B xv | Hanson, C. L. | | |
| Hancock, HOUGHTON CO., MICH. | | | Consolidated Mg. and Milling Co. | | |
| Terrace at..... | 175 | ix | Capital and date of charter..... | 28 | A xvi |
| co., Ohio. | | | West End silver mine operated by..... | 8, 61 | A xvi |
| Natural gas in..... | 115-117 | i | Cross Lake silver mine, | | |
| rapid, KWATABOAHGAN RIVER, ALG. | | | COLEMAN TP., NIP. | | |
| Hand gold mine, L. OF THE WOODS, R. R. D. | 64 | R C | Notes on, 1905..... | 80 | A xv |
| Handlan, —? | 157 | v | Hants co., N. S. | | |
| Handy, J. O. <i>See</i> Handy silver claim. | | | Stibnite found in..... | 209 | vi |
| silver claim, COLEMAN TP., NIP. | | | Happe, Ludwig | | |
| Calcite from, analysis..... | 23 | B xiv | Moss-litter used by, as deodorizer. | 191 | vi |
| Diabase in..... | 29, 50 | B xiv | Harbours. | | |
| Gabbro from, analysis..... | 50, 51 | B xiv | James bay, notes on.... | 128, 129, 132. | iv |
| Producing, 1905..... | 7 | A xv | Nipigon lake..... | 107 | A xvi |
| | | | location, MICHIPICOTEN ISLAND, ALG. | 60 | R C |
| | | | Harcourt, F. Y. | | |
| | | | Work by, 1902..... | 235 | xii |
| | | | Prof Robert | | |
| | | | Analysis by, and notes on, soils of: | | |
| | | | Abitibi dist..... | 243 | A xiv |
| | | | Mattagami valley. 153, 154 | | A xv |

| | Page. | Vol. | | Page. | Vol. |
|---|----------|--------|---|-------------|--------|
| Harcourt tp., HALIBURTON CO. | | | Harmotome. | | |
| Apatite in..... | 194 | ix | O'Connor tp. (Beaver mine).... | 199 | ix |
| Copper prospecting in..... | 47 | xi | Harms, —? | 86 | A xv |
| Molybdenite in..... | 205 | ix | Haro (OR HARRI), Joseph. | 26 | viii |
| Harden, M. W. | 74 | A xiii | Harold lake, SEINE RIVER, R. R. D. | | |
| Hardenburgh, L. M. | | | Description of, by Blue..... | 146 | v |
| Ref. to work by, on magnetic con- | | | Gold on, native..... | 58 | iv |
| centration of iron ore..... | 338 | xii | mining..... | 4 Bull. | i |
| Hardinge, H. W. | 60 | A xiv | | 78, 79, 267 | vi |
| | 67 | A xv | notes by Coleman. 69, 70 | | v |
| Hardman, —? | 147 | ix | Granite on, altered..... | 87 | v |
| John E. | | | Mill erected on..... | 3 | iv |
| Manhattan gold mine examined by. | 274 | viii | gold mine, HAROLD LAKE, R.R.D. | | |
| | 83 | x | Notes on, 1895..... | 145-148 | v |
| Mill plans made by, for Crystal | | | 1896..... | 4 Bull. | i |
| G. M. Co..... | 269 | vi | | 78, 79, 267 | vi |
| Notes by, on the milling of gold | | | Rocks in, granite..... | 103 | v |
| ores..... | 237-243 | vi | | 116 | vi |
| Hardness. | | | in contact with | | |
| Anthraxolite..... | 5 Bull. | ii | Keewatin.... | 158 | vii |
| | 160 | vi | Harper, Dr. W. S. | 33 | A xvi |
| Scale of..... | 448, 535 | R C | Harrer, Hans | | |
| | 201 | vi | Cobalt works of, Schneeberg... 75, 76 | B xiv | |
| | 214 | vii | Harri. See Haro. | | |
| Various minerals, list..... | 201-203 | vi | Harricanaw river, JAMES BAY. | | |
| Hardpan. See Boulder clay. | | | Rocks in..... | 142 | A xiii |
| Hardware. | | | Harrington, Dr. B. J. | | |
| Canadian imports of, 1881-87. 251, 468 | | R C | Analysis by, of:— | | |
| Hardy, A. C. | 104 | A xv | anorthosite, Tudor tp..... | 198 | xi |
| Hon. Arthur Sturgis | | | iron ores, Hastings dist..... | 45, 47 | ii |
| Letter to, re purchase of diamond | | | limestone, Parry Sd. dist..... | 93 | B xiii |
| drill..... | 167-171 | iv | Notes by, on Dalhousie iron mine. 182 | A xvi | |
| Transmittal letter to, 1892..... | 1 | ii | Prof. of chemistry, McGill Uni- | | |
| 1893..... | 3 | ii | versity..... | 217 | i |
| 1894..... | 3, 4 | iii | Ref. to work by, on rocks from | | |
| 1895..... | 2-5 | iv | Dungannon tp..... | 218 | viii |
| 1896..... | 3-6 | v | Report by, (synopsis) on iron | | |
| Vice-Pres., Leo Mg. and Dev. | | | ores of Canada..... | 52-56 | ii |
| Co..... | 87 | x | Views of, on apatite veins..... | 438 | R C |
| tp., P. S. D. | | | tp., ARGENTEUIL CO., QUE. | | |
| Copper prospecting in..... | 171 | ix | Peat in..... | 198 | ii |
| and nickel..... | 262 | viii | Harris, Alexander. | 25 | viii |
| Hare, A. A. | 58 | ix | Capt. | | |
| | 79 | x | Fooled by tin salters..... | 139 | viii |
| J. | 87 | ix | Edward | 29 | v |
| R. E. | 251 | iv | Fred | 28 | ix |
| | 281 | v | Henry | | |
| | 279 | vi | Mica mining by, P. S. d.... | 279, 280 | v |
| Hares. | | | Part owner, Wileox copper mine. 274 | | v |
| Abitibi dist..... | 127 | A xiii | J. R. | | |
| Hargrave (OR White Silver) silver | | | Licence to..... | 103 | viii |
| mine, COLEMAN TP., NIP. | | | Manager, Atikokan iron mine... 61 | A xv | |
| Notes on..... | 83 | A xv | Grace gold mine..... | 61 | xii |
| Photo of..... | 84 | A xv | Joe | 138 | xii |
| Producing, 1905..... | 15 | B xiv | | 83 | A xiv |
| | 7 | A xv | John | | |
| Hargraves, Frederick. | 30 | A xv | Foreman, Copper Cliff mine.... | 70 | vi |
| Harkness, A. H. | 219 | x | | 96 | vii |
| Harland, John | 97 | x | Stobie mine..... | 272 | v |
| R. H. | 264 | v | Sydenham mica mine. 192 | | iii |
| Harlowe, BARRIE TP., FRONTENAC CO. | | | Manager, La Rose silver mine... 74 | A xv | |
| Rocks near, notes by Miller..... | 202 | xi | Joseph | 45 | xii |
| Harmes Machine Co. | 118 | ii | Richard | 131 | x |
| Harmony (LATE Chippawa) river, | | | Ronald | | |
| BATCHAWANA BAY, L. SUPERIOR. | | | See also Harris pyrites mine. | | |
| Copper near..... | 203 | viii | Bucket-tipping device of.... 188, 189 | A xvi | |
| Jasper ore on..... | 190, 201 | x | Manager, Harris pyrites mine. 88 | A xv | |
| | 125 | B xiii | | 165 | A xvi |
| Notes on, by Charlton..... | 201 | viii | | 8 | B xiii |
| Coleman..... | 128 | viii | William (1903) | 174 | ii |
| | | | (1850)..... | | |

| | Page. | Vol. | | Page. | Vol. |
|---|--------|--------|---|----------|--------|
| Harris, Mrs. (mythical) | 88 | vi | Hart, —? | | |
| feldspar mine , BEDFORD TP., | | | Gold prospecting by, Minnitaki | | |
| FRONTENAC CO. | | | lake..... | 179 | vii |
| Notes on, 1902..... | 138 | xii | John | 81 | ii |
| lake , NEAR MANITOU LAKE, | | | P. J. | 75 | A xiii |
| R. R. D..... | 87, 88 | vi | Emery Wheel Co. | | |
| = Maxwell gold claims , LAKE- | | | Tests by, of corundum from | | |
| DER LAKE, NIP. | | | Carlow tp..... | 63 | v |
| Auriferous formation in, width of. | 216 | A xvi | 238, 239..... | | viii |
| Photo of quartz stringers in | | | river , KAWAWIAGAMOG LAKE, | | |
| dolomite in..... | 213 | A xvi | TH. B. D..... | 9 | vi |
| Shipment from, to School of Mines. | 216 | A xvi | Hartford, Samuel L. | | |
| Gold Mg. Co. | | | Lime-burning by, with gas fuel. | | |
| Capital and date of charter..... | 28 | A xvi | 126, 127..... | | i |
| Oil Co. | | | Gold Mg. and Dev. Co. | | |
| Exhibits of, at Pan-American | | | Capital and date of charter... .. | 10 | ix |
| Exhibition..... | 25 | A xv | Hartney, James <i>See</i> Farquharson, | | |
| pneumatic system. | | | McLaughlin & Hartney. | | |
| For marl dumping, notes and | | | Harty, William | 178 | iii |
| diagrams..... | 132 | A xiv | Hartz mts., GERMANY. | | |
| pyrites mine , JAMES LAKE, | | | Peat in, used for metallurgical | | |
| TIMAGAMI DIST., NIP. | | | operations..... | 200 | ii |
| Bucket tip of, diagram and notes. | | | jig. | | |
| 188-190..... | A xvi | | Concentration of corundum by, | | |
| Notes on, by Fraleck..... | 165 | A xvi | results..... | 243 | vii |
| Overlapping lenses in..... | 183 | A xvi | Harvard, OTTAWA. | | |
| Photos of..... | 166 | A xvi | Brick yards at, notes on..... | 60, 61 | B xv |
| Shipping, 1906..... | 74 | A xvi | Harvey, Albert | | |
| Harrisburg, S. DUMFRIES TP., BRANT | | | Gold prospecting by ; | | |
| CO. | | | Minnitaki lake..... | 179 | vii |
| Brick making at..... | 59 | B xv | Wawa lake, near..... | 104, 195 | vii |
| Clay from, for Paris cement | | | Licence to..... | 103 | viii |
| works..... | 115 | B xv | 116..... | | ix |
| Harrisburg, U. S. | | | Arthur | | |
| Blast furnaces at, reason for loca- | | | Evidence by, before R. C. <i>re</i> :— | | |
| tion..... | 127 | ii | coke and charcoal for smelting. | 396 | R c |
| Harrison, Grace | 74 | xi | gold ores and mining, L. of the | | |
| H. B. | | | Woods..... | 116, 428 | R c |
| Govt. drill lent to..... | 51, 53 | xii | prospectors' interests..... | 416 | R c |
| Vice-President, Imperial Cement | | | want of railways..... | 240 | R c |
| Co..... | 108 | ix | Part owner, Sawbill g. m..... | 41 | viii |
| 17..... | x | | E. | | |
| John B. | | | Limestone quarry of, Rockwood. | 126 | B xiii |
| Agreement with, for well sink- | | | E. E. | | |
| ing..... | 22, 23 | vi | Gold mining by, Minnitaki lake. | | |
| J. E. | | | 70, 71..... | | viii |
| Actinolite mining by, Actinolite. | 92 | iii | H. A. <i>See</i> Harvey steel | | |
| Evidence by, before Roy. Com.... | 82 | R c | process. | | |
| extract from..... | 64 | B xiii | J. | 116 | ix |
| Owner, Henderson tale mine.... | 297 | xi | 141..... | | x |
| Pyrites mining by, Madoc tp.... | 95 | A xiii | John | 57 | ix |
| Tale discovered by, near Madoc. | 130 | x | T. R. | 103 | viii |
| W. L. | 116 | ix | W. A. | 132 | vii |
| 141..... | x | | Steel Co. | | |
| 74..... | xi | | Negotiations of, with British | | |
| falls , NEAR MANITOU LAKE, | | | Admiralty..... | 142 | ii |
| R. R. D..... | | | steel process. | | |
| Waterpower of..... | 123 | vii | Adopted by British Admiralty.. | 154 | iii |
| quarry , ACTINOLITE, HASTINGS | | | Beneficial results of..... | 148, 149 | iii |
| CO. | | | Tents on..... | 155-158 | iii |
| Limestone from, analysis..... | 65, 66 | B xiii | tp., PETERBORO CO. | | |
| talc mine , MADOC, HASTINGS | | | Gold in..... | 213 | viii |
| CO. | | | 204..... | | xi |
| Notes on, 1903..... | 92 | A xiii | Limestone in. <i>See</i> Pigeon lake. | | |
| Harrow tp., ALG. | | | Lithographic stone in..... | 88 | xi |
| Rocks in. <i>See</i> Lacloche lake. | | | Harwich tp., KENT CO. | | |
| Harshaw, Fuller and Goodwin | 122 | ix | Artesian well in..... | 59 | i |
| | | | Gas in..... | 123-127 | i |
| | | | 29..... | | v |

| | Page. | Vol. | | Page. | Vol. |
|--------------------------------------|----------|--------|--|-------------|--------|
| Harzburgite. | | | Hattie Bell (or Lafex) copper mine. | | |
| New Caledonia..... | 69 | B xiv | FOLLY TP., P. S. D. | | |
| Haskins, John C. | 202, 427 | B C | Notes on, by Coleman..... | 261 | viii |
| Hass, Charles | 28 | ix | | 167 | ix |
| Hassard, A. | 116 | ix | <i>See also next ref.</i> | | |
| R. | 141 | x | Bell Gold, Copper and Nickel Co. | | |
| Hastings co. AND dist. | | | Capital and date of charter..... | 9 | viii |
| Arsenic ore in, analysis..... | 101 | xi | Lafex copper mine worked by..... | 261 | viii |
| mining..... | 36 | xii | | 167 | ix |
| notes by Wells..... | 102-105 | xi | Work by, 1899..... | 100 | ix |
| Brick yards in, notes on..... | 69, 70 | B xv | Houghton tp., Alb. | | |
| Corundum in..... | 207-230 | vii | Copper in..... | 23 | xi |
| 205, 217-222..... | viii | | mining..... | 100, 164 | xii |
| map showing..... | 207 | vii | Haultain, H. E. T. | 97 | A xiv |
| mining..... | 82 | A xvi | | 84 | A xvi |
| Danaite in..... | 197 | ix | Hausmannite. | | |
| Geology of, notes by Miller..... | 186-207 | xi | Description of..... | 216 | vi |
| Gold in, character of formation..... | 39 | iv | Havard, E. T. | 140 | vii |
| discovery and early | | | Havelock, BELMONT TP., PETERBORO' | | |
| mining..... | 53-55 | iii | co. | | |
| mining, past and future..... | 8 | v | Kame gravels near..... | 232 | A xiii |
| 1897..... | 89 | vii | Limestone near, analysis..... | 98 | B xiii |
| 1898..... | 40, 41 | viii | Havre, FRANCE. | | |
| 1899..... | 91-93 | ix | Nickel refining at..... | 146 | ii |
| 1900..... | 111-117 | x | | 175 | C xiv |
| notes by Bell..... | 27, 28 | R C | Hawk. | | |
| Merritt..... | 106 | R C | Caribou island, L. Superior..... | 111 | v |
| Selwyn..... | 5-68 | R C | night | | |
| prospecting for..... | 234 | vii | Abitibi dist..... | 126 | A xiii |
| " requires | | | Bay gold mine, SEINE RIVER, | | |
| technical knowledge..... | 427 | R C | R. R. D. | | |
| Iron and iron mining in:— | | | Granite in..... | 116 | vi |
| chromium in..... | 233 | vii | Notes on, 1896..... | 54, 75, 267 | vi |
| Coste's views..... | 57 | ii | 1897..... | 66, 67, 132 | vii |
| notes by Blue..... | 58-62 | ii | Bay Gold Mg. Co. | | |
| Macfarlane..... | 39, 40 | ii | <i>See also Hawk Bay gold mine.</i> | | |
| Murray..... | 36-39 | ii | Capital and date of charter..... | 9 | vii |
| Pusey..... | 111, 112 | ii | lake, MICHIGICOTEN DIV. | | |
| Vennor..... | 41-51 | ii | Granite on..... | 204 | vii |
| tests with Wetherill separator..... | 332, 333 | xii | | 206 | A xv |
| Limestone in, notes by Miller..... | 59 | B xiii | Map of (sketch)..... | 203 | A xv |
| marble quarrying..... | 80-82 | R C | Nickel prospecting on..... | 11 Bull. | iii |
| <i>See also Crookston.</i> | | | | 206 | vii |
| Melanterite in..... | 194 | ii | Sand beach on, photo..... | 156, 157 | vii |
| Meteorite that fell in..... | 173 | C xiv | Terrace on..... | 198 | A xv |
| Sillimanite in crystalline schists | | | (KEEK-KEEK) lake, SHEBAN- | | |
| of..... | 209 | ix | DOWAN LAKE DIST. | | |
| Sodalite in..... | 209 | ix | Granite on..... | 81 | v |
| Sulphur in galena ores of..... | 22 | A xvi | Minor ref. to..... | 130 | v |
| Taconian series in..... | 169 | i | Notes on, by Blue..... | 128, 129 | v |
| Talc production in, 1904..... | 23 | A xiv | river, MICHIGICOTEN DIV. | | |
| Iron Co. | | | Glaciation on..... | 206 | A xv |
| Capital and date of charter..... | 9 | vii | Gold mining on, 1898..... | 101 | vii |
| Mining and Reduction Co. | | | Rapids on..... | 202 | A xv |
| Capital and date of charter..... | 9 | vii | Rocks on, and description..... | 196, 197 | vii |
| Gatling gold mine worked by..... | 238 | ii | Hawkesbury, HAWKESBURY (W) TP., | | |
| Mill of, photo, plan, description | | | PRESOTT CO. | | |
| and section..... | 56-61 | iii | Axinite at..... | 195 | ix |
| Pearce gold mine worked by..... | 53 | iii | Chazy limestone at..... | 46 | B xiii |
| series. <i>See Grenville series.</i> | | | Sulphite pulp plant at..... | 199 | A xvi |
| Silver Lead Mining Co. | | | (East) tp., PRESOTT CO. | | |
| Capital and date of charter..... | 9 | vii | Fault in. <i>See St. Anne de Pres-</i> | | |
| Hastingsite. | | | cott. | | |
| Dungannon tp., analysis..... | 199 | ix | Limestone in..... | 98 | B xiii |
| In corundum-bearing rocks..... | 211 | vii | quarries..... | 99 | B xiii |
| Hatch, M. P. | 61 | viii | (West) tp., PRESOTT CO. | | |
| Prof. | 125 | viii | Limestone in, quarries..... | 99 | B xiii |
| | | | Trenton..... | 98 | B xiii |
| | | | Marl in..... | 122 | A xiv |

| | Page. | Vol. |
|--|--------------|------|
| Hawkeye gold mine , MARMORA TP., HASTINGS CO. | | |
| Minor ref. to..... | 197 | xi |
| Mispickel in..... | 110 | R C |
| Hawley, A. W. | | |
| Iron bounties paid to, 1902..... | 25 | xii |
| Hawthorn. | | |
| Michipicoten div..... | 296 A | xiv |
| Moose River basin..... | 176 A | xiii |
| Hay, Alexander M. | | |
| Gold prospecting by, L. of the Woods dist..... | 185 | v |
| Manager, Dominion Gold Mg. & Red. Works..... | 37, 54 | vii |
| Kenora Red. Works.. | 89 | x |
| Minor ref. to..... | 174 | v |
| Owner, Rabbit Mt. silver m..... | 96 | viii |
| | 85 | ix |
| William | 50 A | xvi |
| Hay. | | |
| Abitibi dist..... | 244 A | xiv |
| Albany river..... | 111, 112 | iv |
| Cloud creek, L. Superior..... | 146 | ix |
| Frederick House River basin.... | 197 A | xiv |
| Michipicoten div., lands adapted for..... | 13 Bull. iii | |
| | 206 | vii |
| Montreal River basin..... | 173 | vi |
| Wabigoon lake, near..... | 171 | vii |
| beaver | | |
| Tully tp..... | 222 A | xiv |
| creek , MISSISSAUGA RIVER, ALG. | | |
| Description of Moose river near . | 139 | ix |
| island , L. OF THE WOODS, R. R. D. | | |
| See also Hay Island g. m. | | |
| Carbonaceous shale near..... | 104 | vi |
| Gold on..... | 233 | ii |
| specimens..... | 64 | R C |
| Indian grave on, photo..... | 80, 81 | vi |
| island , OFF BRUCE CO..... | 36 B | xiii |
| island (KEEWATIN) gold mine , HAY ISLAND, L. OF THE WOODS. | | |
| Mispickel in ore of..... | 116, 117 | R C |
| Notes on, 1897..... | 36, 111 | vii |
| 1898..... | 55 | viii |
| 1899..... | 42 | ix |
| Situation and owners of..... | 118 | R C |
| | 233 | ii |
| pt. , ST. JOSEPH ISLAND, L. HURON. | | |
| Clinton formation at..... | 79 B | xiii |
| Haycock, E. B. | | |
| Acknowledgments to..... | 83, 85 | vi |
| Gold mining by, Manitou lake.. | 6 Bull. i | |
| | 84 | vi |
| Edward | | |
| Evidence by, before R. C..... | 56 | R C |
| ref. to..... | 149 A | xvi |
| hill , LARDER LAKE, NIP. | | |
| Rocks on..... | 207 A | xvi |
| iron mine , HULL TP., QUE. | | |
| Ore of, notes by Selwyn..... | 68 | R C |
| tp. , R. R. D. | | |
| Gold mining in..... | 57 | vii |
| See also Black Sturgeon mine. | | |
| Hayden , MICHIPICOTEN DIV., ALG. | | |
| Terrace at..... | 199 A | xv |

| | Page. | Vol. |
|---|------------|------|
| Haydenville , HOCKING CO., OHIO. | | |
| Paving clay from, analysis..... | 120 | iii |
| Haydon, James S. | 178 | iii |
| Hayes, Dr. A. A. | | |
| Assays by, of ores from :— | | |
| Pic river..... | 37 | R C |
| | 313 | xii |
| Silver islet..... | 139 | vi |
| Tip-top copper mine..... | 75 | v |
| C. W. | 269 A | xiv |
| Charles | | |
| Iron works of, Marmora tp..... | 254, 321 | R C |
| | 14-18 | ii |
| E. N. | | |
| Operating Gibson mica mine..... | 290, 291 | xi |
| F. B. | | |
| Mica mining by, Calvin tp..... | 196 | iii |
| Montrose | 44, 48 | xii |
| Robert | | |
| Part owner, Marmora foundry .. | 16 | ii |
| Hayner, E. | 103 | viii |
| Hazel. | | |
| Abitibi River dist..... | 193 | viii |
| Michipicoten div..... | 296 A | xiv |
| Moose River basin..... | 176 A | xiii |
| Wabigoon lake (near)..... | 171 B | vii |
| Hazelnut. | | |
| Brulé lake, near Shebandowan lake..... | 205 | v |
| H. B. gold loc. , 411 KENORA MG. DIV., R. R. D..... | 43 A | xvi |
| Head, Edmund | 127 | vi |
| Headquarters lake , N. OF LARDER LAKE, NIP. | | |
| Notes on, and vicinity, by Miller..... | 221, 222 | xi |
| Headden, W. P. | | |
| Statement by, re columbite in S. Dakota..... | 236, 237 | vii |
| Headlight Gold Mg. Co. | | |
| See Swede Boy gold mine. | | |
| Capital and date of charter..... | 10 | ix |
| Heads and Sills. | | |
| Statistics of. See Building-stone statistics. | | |
| Healy falls , TRENT RIVER. | | |
| Escarments near..... | 97 B | xiii |
| Fossiliferous limestone near..... | 88 B | xiii |
| Minor ref. to..... | 21 | ii |
| Hearst tp. , NIP. | | |
| Gold locations in, map showing. | 202, 203 A | xvi |
| Heart lake , DOG RIVER, L. SUPERIOR. | | |
| Brulé patches on..... | 296 A | xiv |
| Length of..... | 285 A | xiv |
| Minor ref. to..... | 290, 292 A | xiv |
| Railway near, proposed..... | 289 A | xiv |
| Rocks on and near..... | 348 A | xiv |
| iron-bearing..... | 325 A | xiv |
| chert..... | 314 A | xiv |
| lake , NEAR VERMILION LAKE, TIMAGAMI DIST., NIP. | | |
| Jaspilite near..... | 170 | x |
| mt. , HEART LAKE, MICHIPICOTEN DIV. | | |
| Altitude of..... | 282 A | xiv |
| Minor ref. to..... | 160 | ix |
| Rocks near..... | 325 A | xiv |
| chert..... | 314 A | xiv |

| | Page. | Vol. |
|---|---------------|------|
| Heath, Josiah Marshall | | |
| Invention of, for steel-making. | xxi, 363 | R C |
| Heathcock Mining Co. | | |
| Capital and date of charter..... | 29 A | xvi |
| Heather Bell Gold Mining Co. | | |
| Capital and date of charter..... | 7 | vi |
| | 9 | vii |
| Heating power. <i>See</i> Calorific power. | | |
| Heavy spar. <i>See</i> Barytes. | | |
| Hebe falls, L. OF THE WOODS | 169 | v |
| Heck, George C. | 162 | ix |
| Mrs. George..... | 162 | ix |
| Hecker, F. J. | 198 | R C |
| Heckston, S. GOWER TP., GRENVILLE | | |
| Co. | | |
| Calcareous formation in..... | 47 B | xiii |
| Hedden, Russell | | |
| Brick-making by, Crediton..... | 71 B | xv |
| Hedden, W. | | |
| Brickyard of, Crediton..... | 50 B | xv |
| Hedges, Henry S. | | |
| Evidence by, before R. C. re:— | | |
| iron near Wallace mine..... | 143 | R C |
| prospectors' rights..... | 308 | R C |
| Hedley, Robert | | |
| Evidence by, before R. C. re:— | | |
| developing lands..... | 310 | R C |
| Sudbury dist..... | 105 | R C |
| gold..... | 59 | R C |
| silver..... | 203 | R C |
| William H. | | |
| Evidence by, re royalties in | | |
| Great Britain..... | 17 | i |
| Hedlund, Adolphus | 42, 50 | x |
| <i>Hedysarum boreale.</i> | | |
| Mattagami valley..... | 150 A | xv |
| Heenan, George | | |
| Gold mine of, L. of the Woods. | 117, 118, 446 | R C |
| <i>See also</i> next ref. | | |
| gold mine, BIGSTONE BAY, L. | | |
| OF THE WOODS. | | |
| Idle, 1896..... | 98 | vi |
| Situation of, and owners..... | 233 | ii |
| pt., L. OF THE WOODS. | | |
| Gold mining near. <i>See</i> Climax | | |
| mine. | | |
| Minor ref. to..... | 173 | v |
| Heiden, Prof. Edward | 143 | iii |
| Height-of-Land (THE MAIN). | | |
| Notes on, by Gibson..... | 102 | iv |
| Heinen, A. | 199 | xii |
| Helderberg formation, Lower | | |
| Bertie tp..... | 46 | R C |
| Detroit river..... | 123 | xi |
| Port Colborne..... | 129 | i |
| Position of, in Silurian..... | 2 | R C |
| Heldrith, Jeff. | 232 | ii |
| Helen bay, MANITOULIN ISLAND, L | | |
| HURON. | | |
| Niagara formation near..... | 79 B | xiii |
| iron mine, SAYERS AND BOYER | | |
| LAKES, MICHIGOTEN DIV. | | |
| Accidents at 1900..... | 47, 54-57 | x |
| 1901..... | 54-57 | xi |
| 1902..... | 47 | xii |
| 1903..... | 39 A | xiii |
| 1905..... | 29 A | xv |
| 1906..... | 32-35 A | xvi |

Helen iron mine.—*Con.*

| | Page. | Vol. |
|---------------------------------|------------------------------|------|
| Analyses of ore from..... | 192, 193 | x |
| | 170 | xi |
| | 60 A | xiv |
| Boring plant purchased for..... | 42 A | xiii |
| Boulder-clay on..... | 185 | xi |
| Character of deposit..... | 220 A | xiii |
| Closed, 1903..... | 7, 58 A | xiii |
| Employees of, character of..... | 57 A | xiii |
| Forest fire near, photo..... | 64, 65 | xi |
| Hematite in..... | 16 A | xvi |
| Importance of..... | 27 | x |
| | 18, 56 A | xvi |
| Iron discovery near..... | 172, 181 A | xv |
| pyrites in..... | 38 | xii |
| | 20 A | xv |
| | 22, 220 A | xiii |
| | 22, 185, 201 A | xvi |
| paper by Fraleck,.... | 165-170 A | xvi |
| geological relationship.... | 182 A | xvi |
| Notes on, 1839..... | 112, 113 | ix |
| 1900..... | 126, 127, 137, | |
| | 138, 191-194 | x |
| 1901..... | 67, 70, 71, 167-170 | |
| | 263-265 | xi |
| 1902..... | 60-64, 102, 103 | xii |
| 1903..... | 46, 221, 222 A | xiii |
| 1904..... | 11, 12, 35, 59 A | xiv |
| 1905..... | 14, 15, 70, 71 A | xv |
| 1906..... | 72, 73 A | xvi |
| by Coleman..... | 221 A | xiii |
| | 187-189 A | xv |
| Goodwin..... | 91 | xi |
| Ochre, yellow, in..... | 169 A | xvi |
| Operating, 1905..... | 47 A | xv |
| Ore deposit of, compared with | | |
| those S. of L. Superior..... | 197 | x |
| Ore from, for Midland furnace.. | 30 | x |
| Owner of..... | 101 | viii |
| Photos..... | 192, 193 | x |
| | 128, 129, 160, 161, 176, 177 | xi |
| | 80, 81, 97, 98 A | xiii |
| Production, 1901..... | 23 | xi |
| 1902..... | 19, 53 | xii |
| 1903..... | 9 A | xiii |
| 1905..... | 188 A | xv |
| Report on and vicinity, by | | |
| Coleman..... | 155-160 | ix |
| Rocks of and near..... | 194-198 | x |
| chert..... | 312 A | xiv |
| iron-formation, character..... | 114 A | xvi |
| quartz-porphry, photo.... | 160, 161 | xi |
| | 175 A | xvi |
| Siderites near..... | 308 | xii |
| petrographical notes..... | 204 | x |
| Success of, depends on R'y | | |
| communications..... | 7 | xii |
| Terraces near..... | 196 A | xv |
| Iron formation. | | |
| Description and distribution. | | |
| | 155, 159-162 | xi |
| Julia river, section showing | | |
| structure..... | 336, 337 A | xiv |
| Notes on, by J. M. Bell. | | |
| | 300, 301, 307-317 A | xiv |
| Moore..... | 204 A | xv |
| Petrography of..... | 182-184 | xi |
| Position of, in Huronian..... | 174 A | xv |
| Section of, at Goetz claim..... | 182 A | xv |

| | Page. | Vol. | | Page. | Vol. |
|---|----------|--------|--|----------|--------|
| Helena gold and copper mine, BAR- | | | Hematite mt., BOYER LAKE, MICH- | | |
| RIE TP., FRONTENAC CO. | | | PICOTEN DIV. | | |
| Minor ref. to..... | 37 | x | <i>See also</i> Helen iron mine. | | |
| Notes on, 1900..... | 117, 118 | x | Altitude of..... | 153 | xi |
| Ores of..... | 203 | xi | Boring on, for iron..... | 194 | x |
| Rocks near..... | 202 | vi | Section across top of..... | 135 | x |
| Shut down, 1901..... | 236 | xi | Siderites of..... | 204 | x |
| Mining Co. | | | | 188 | A xv |
| Actinolite mining by, 1902..... | 26 | xii | View from, description of..... | 153 | xi |
| lake, NEAR PIPESTONE LAKE, R. | | | station, R.R.D. | | |
| R. D. | | | Gold mining near. <i>See</i> Sunbeam | | |
| Rocks on; quartz veins on..... | 61 | iv | mine. | | |
| Mining Co. | | | Hemlock. | | |
| Actinolite mining by, 1902..... | 26 | xii | Loring, near..... | 170 | ix |
| Helenaveen, HOLLAND..... | 200 | xii | McConkey tp..... | 171 | ix |
| | 34 | A xii | Timiskaming lake..... | 121 | iv |
| Heliophyllum. | | | lake. See MacKay lake. | | |
| Bertie tp..... | 119 | B xiii | Hempton, T. J..... | 214 | v |
| Jawbone creek, Abitibi river.... | 182 | viii | Hen and Chickens, The, GEORGIAN | | |
| Theodford..... | 8, 75 | B xv | BAY, L. HURON. | | |
| " <i>crispatum</i> . | | | Limestone on..... | 109 | B xiii |
| Port Colborne, near..... | 35 | xi | Hendershott, William M. | | |
| Villa Nova..... | 143 | xii | Quarries of, Queenston, notes... | 95 | i |
| " <i>bulbi</i> . | | | | 73 | B xiii |
| Abitibi river..... | 187 | viii | Henderson, Archibald | | |
| Anderdon tp..... | 125 | xi | Clement lake discovered by.... | 124 | A xv |
| Port Colborne, near..... | 35 | xi | Notes by, on timber of Abitibi | | |
| Heliotrope. See Blood-stone. | | | dist..... | 244, 245 | A xiv |
| Helium. | | | Report by, on agricultural re- | | |
| Association of, with fergusonite.. | 236 | vii | sources of:— | | |
| Hell gate, MISSISSAUGI RIVER, ALG. | | | Abitibi dist..... | 213-247 | A xiv |
| Limestone near, Corniferous.... | 47 | R C | Mattagami valley..... | 136-155 | A xv |
| fossiliferous..... | 32 | B xii | Work by, 1901..... | 184 | A xiv |
| swamp, GLENGARRY CO. | | | 1905..... | 116 | A xv |
| Calcareous formation of..... | 47 | B xiii | Charles | | |
| Hell (OR LONG) rapid, MISSISSAUGI | | | Counsel to Ledyard gold mine .. | 234 | iv |
| RIVER, ALG..... | 224, 225 | A xiii | Charles | | |
| Hell=diver. | | | Evidence by, <i>re</i> accident, Ophir | | |
| Roseland (Ont) near..... | 29 | iii | mine..... | 204 | iv |
| bay, L. OF THE WOODS, ONT. | | | Charles | | |
| Gold mining on..... | 57, 58 | ix | Work by, Vermilion river, 1898.. | 256 | vii |
| Rocks on..... | 121 | vii | David, See Christie, Hender- | | |
| Hellespont. See Dardanelles. | | | son & Co. | | |
| Helsingland. | | | Thomas | | |
| Nickel discovered in..... | 163 | C xiv | Brick-yard of, Renfrew..... | 96 | B xv |
| Hematite. | | | clay for, analysis.... | 15 | B xv |
| <i>See also</i> Iron and Iron mining. | | | co., TEXAS. | | |
| Arnprior..... | 137 | R C | Iron ore in..... | 101 | ii |
| Composition and description of.. | 535 | R C | lake, VERMILION RIVER, NIP. | | |
| Connexion of, with limestone... | 466 | R C | Terraces, rocks and Indians on.. | 156 | x |
| Determination of..... | 203, 215 | vi | steel converter. | | |
| Fort Matachewan..... | 113 | A xiii | Paper on, by E. Garlick.... | 488-491 | R C |
| Gros Cap, L. Superior..... | 145 | viii | talc mine, near MADOC, HAST- | | |
| Hardness of..... | 202 | vi | INGS CO. | | |
| Hastings co..... | 39, 40 | ii | Idle, 1901..... | 297 | xi |
| Madoc tp..... | 288 | viii | Minor reference to..... | 27 | xii |
| Hints on, to prospectors..... | 454 | R C | Notes on, 1900..... | 130 | x |
| Kingston-Pembroke R'y. dist., | | | 1904..... | 87 | A xiv |
| evidence before R. C..... | 131-141 | R C | 1905..... | 106 | A xv |
| Magnetic permeability of..... | 324 | xii | Operating, 1903..... | 13 | A xiii |
| Mississagi river..... | 161 | xii | Hendrickson, George N..... | 231 | i |
| Occurrences of..... | 199 | ix | Hendry, A. | | |
| Pyrites underlying, notes by | | | Gold mining by, Seine river.... | 132 | vii |
| Fracleck..... | 182 | A xvi | J. A..... | 102 | R C |
| Specific gravity of..... | 202 | vi | Henesey, Jacob H. | | |
| Varieties of..... | 535 | R C | Gold mining by, Regina bay, L. | | |
| notes by Harrington..... | 55 | ii | of the Woods..... | 182 | v |
| brown See Limonite. | | | Part owner, Rajah and Sultana | | |
| | | | mines..... | 231 | ii |
| | | | | 16, 28 | iii |

| | Page. | Vol. |
|---|-------------------|--------|
| Henley House, ALBANY RIVER, ALG. | | |
| Built, 1744..... | 196 | v |
| Minor ref. to..... | 193 | v |
| Hennebique concrete system. | | |
| Description and illustration..... | 178, 179 | A xiv |
| Henriksen, G. | 306 | A xiv |
| Henry, Alexander | | |
| Mining operations of, L. Superior. | | |
| 92, 194..... | 92, 194 | R C |
| 111-113, 197, 209..... | 111-113, 197, 209 | v |
| Notes by, on Indian cannibalism. | 138, 139 | v |
| Henry, R. | 48 | A xiii |
| S. Hedges | 308 | R C |
| mts., COLORADO, U. S. | | |
| Laccolites of, ref. to..... | 156 | vii |
| Henson, Dr. Thomas | | |
| Evidence by, before R. C. re:— | | |
| gold, L. of the Woods..... | 118 | R C |
| iron, Eagle river..... | 64, 145 | R C |
| Henwood tp., Nip. | | |
| Blanche river in, course of..... | 36 | B xiv |
| Hepworth, AMABEL TP., BRUCE CO. | | |
| Brick making in..... | 59 | B xv |
| Clay at, Saugeen..... | 19 | B xv |
| Gas at and near:— | | |
| company formed to develop..... | 21 | x |
| log of wells..... | 45 | xi |
| | 109, 114 | A xv |
| Heracleum lanatum. | | |
| Abitibi Lake dist..... | 242 | A xiv |
| Mattagami valley..... | 150 | A xv |
| Heccoceras auriculatum. | | |
| Kwataboahagan river, notes by | | |
| Parks..... | 190 | A xiii |
| diagram..... | 192, 193 | A xiii |
| Herculaneum, NEAR NAPLES, ITALY. | | |
| Mortar used in, character of..... | 13 | B xiii |
| Herkimer co., N. Y. | | |
| Niagara formation in..... | 44 | R C |
| Herman, Edward L. | 68 | A xv |
| James A. | | |
| <i>See also</i> Herminia copper mine. | | |
| Gold prospecting by, Jaffray tp. | | |
| 108, 109..... | 108, 109 | vi |
| Joseph. | 83 | A xv |
| Herman, BUTLER CO., PA. | | |
| Natural gas at..... | 148 | i |
| Hermann, A. B. | | |
| <i>See also</i> Redeemer gold mine. | | |
| Gold mining by, Van Horne tp..... | 214 | xi |
| Hon. Binger | | |
| Evidence by, re nickel, to Dingley | | |
| committee..... | 42 | vi |
| M. & Co. | 122 | xi |
| Herminia copper mine, SALTER TP., ALG. | | |
| Average copper contents..... | 12 | A xv |
| Notes on, 1903..... | 79 | A xiii |
| 1904..... | 61, 62 | A xiv |
| 1905..... | 68 | A xv |
| and photos..... | 68, 69 | A xvi |
| Producing, 1906..... | 15 | A xvi |
| Sulphide deposits in..... | 11 | A xiv |
| Mg. Co. | | |
| Capital and date of charter..... | 37 | A xiii |
| Work by, 1903..... | 79 | A xiii |

| | Page. | Vol. |
|---|--------------|--------|
| Heron bay, L. SUPERIOR. | | |
| Egeline on..... | 192 | ix |
| Analcite on..... | 193 | ix |
| Gold mining on..... | 62, 115, 116 | R C |
| Heronite on, paper by Coleman. | 186-191 | ix |
| Rocks on and near..... | 135 | viii |
| dike rocks..... | 172 | viii |
| schists..... | 167 | viii |
| Silver near..... | 29 | R C |
| mine, HERON BAY, L. Su- | | |
| PERIOR. | | |
| Character of ore..... | 135 | viii |
| Mining Co. | | |
| Capital and date of charter..... | 9 | vii |
| Heronite. | | |
| Heron bay, L. Superior..... | 208 | xi |
| Paper on, by Coleman..... | 186-191 | ix |
| Herrenschmidt process. | | |
| For refining nickel..... | 157 | ii |
| Herreshoff furnace. | | |
| Description of..... | 377 | R C |
| For pyrites ores, notes..... | 194 | A xvi |
| Herrick, T. W. | 138, 241 | viii |
| Thomas | 195 | R C |
| Herring. | | |
| James Bay tributaries..... | 133 | iv |
| Herrington, A. J. | 51 | A xiv |
| Herschel tp., HASTINGS CO. | | |
| Biotite in..... | 195 | ix |
| Corundum area of..... | 216 | viii |
| Pyroxene in..... | 207 | ix |
| Herson island, L. St. CLAIR, U. S. | 108 | v |
| Hertz, George | | |
| Brick making by, Crediton..... | 71 | B xv |
| Hespeler, WATERLOO S. TP., WATER- | | |
| LOO CO. | | |
| Fossiliferous limestone at..... | 115 | B xiii |
| Lime kilns at..... | 14 | A xiii |
| Hess, G. H. | | |
| On acetylene gas..... | 29 | vi |
| Hesse. | | |
| Tax in, on mining allotments..... | 297 | R C |
| Hessite. | | |
| Gold creek, Pine Portage bay, L. | | |
| of the Woods, analysis..... | 105 | v |
| 199..... | 199 | ix |
| Kootenay dist., B. C..... | 106 | v |
| Tellurium in..... | 210 | ix |
| Heterogenite. | | |
| Cobalt dist..... | 100 | A xiii |
| Hetherington,—? | | |
| Interested in Marmora iron works | | |
| (1830)..... | 46, 21 | ii |
| Heulandite. <i>See</i> Stilbite. | | |
| Heurvaux, — ? | 118 | xi |
| Hewlett, Alfred | | |
| Evidence by, re royalties, Gt. | | |
| Britain..... | 29 | i |
| Statement by, re Wigan Mining | | |
| School..... | 493 | R C |
| Hews, R. S. | 286 | xi |
| Heys, Prof. Thomas | | |
| Analysis and assays by, of:— | | |
| brick-clay, Toronto..... | 128 | iii |
| copper ore, Graham tp..... | 105 | R C |
| McConkey tp..... | 171 | ix |
| iron ore, Galway tp..... | 131 | R C |
| near Blairton..... | 130 | R C |

| | Page. | Vol. | | Page. | Vol. |
|--|---------------|-------|--|------------|--------|
| Heys, Prof. Thomas—Con. | | | Hickston corners, GRENVILLE CO. | | |
| Analysis and assays by, of.— <i>Con.</i> | | | See Heckston. | | |
| quartz, McGown gold m..... | 265 | v | Hidden, W. E. | 212 | ix |
| Wanapitei lake..... | 88 | vii | Treasure gold mine, LOWER | | |
| Gold found by, in quartz from | 112 | R C | SEINE RIVER, R.R.D. | | |
| Creighton tp..... | 92 | i | Notes on, 1900 | 85 | x |
| Heywood island, L. HURON. See | | | Hides. | | |
| Rat island. | | | Arsenical soap for, composition of. | 118 | xi |
| HF 1 iron locs., SAND CREEK, L. | | | <i>Hieracium canadense.</i> | | |
| NIPIGON. | | | Abitibi Lake dist..... | 241 | A xiv |
| Jasper in..... | 121 | A xvi | Mattagami valley..... | 151 | A xv |
| 4 iron loc., SAND CREEK, L. | | | Higbee, E. | | |
| NIPIGON. | | | Gold mining by, Eagle Lake dist. | 66 | A xiii |
| Rocks in..... | 122 | A xvi | Newton | | |
| 5 iron loc., N. OF SAND CREEK, | | | Acknowledgments to..... | 66 | A xiii |
| L. NIPIGON. | | | Manager, Eagle Lake g. m..... | 95 | x |
| Notes on, by Coleman..... | 122 | A xvi | Eldorado g. m..... | 93 | xii |
| Rocks on, conglomerate..... | 112 | A xvi | 49 | A xiv | |
| 10-13 iron locs., WEST OF WINDI- | | | Northern Lights Mg. Co. | 65 | A xiii |
| GOKAN LAKE, TH. B. D. | | | Orion g. m..... | 62 | ix |
| Notes on, by Moore..... | 144 | A xvi | Pioneer Island g. m.... | 48 | A xiv |
| 10, 15 iron locs., WATSON LAKE, | | | Owner, Golden Eagle g. m..... | 64 | A xiii |
| TH. B. D. | | | 55 | A xv | |
| Jasper and hematite in schists | | | Higgins, A. E. | 36 | ix |
| of..... | 145, 147 | A xvi | Higgins, —? | 61 | x |
| 19 loc., WINDIGOKAN LAKE, | | | High Falls, PORTLAND TP., FRONTENAC | | |
| TH. B. D. | | | CO. | | |
| Rocks on..... | 140, 141, 146 | A xvi | Boring at, for oil..... | 283 | v |
| 20, 31 iron locs., NEAR L. WINDI- | | | falls, SPANISH RIVER. | | |
| GOKAN, TH. B. D. | | | Water power at, notes..... | 71 | A xiv |
| Rocks of..... | 142 | A xvi | plant.... | 13, 62, 63 | A xv |
| 21 iron loc., WINDIGOKAN LAKE, | | | falls, MADAWASKA RIVER. | | |
| TH. B. D. | | | Diopside at..... | 197 | ix |
| Arkose rocks in..... | 146 | A xvi | Pargasite at..... | 206 | ix |
| 23, 26 iron locs., NEAR TALLOW | | | Tourmaline near..... | 211 | ix |
| LAKE, TH. B. D. | | | falls, MICHIPICOTEN RIVER. | | |
| Rocks in..... | 141 | A xvi | Description of..... | 192 | vii |
| 27 iron loc., WINDIGOKAN LAKE | | | Fall of..... | 176 | A xv |
| DIST., TH. B. D. | | | Iron formation near..... | 181, 204 | A xv |
| Conglomerate in, description.. | 147 | A xvi | Photo of..... | 140, 141 | vii |
| 32, 35, 39 iron locs., N.E. OF | | | Stratified deposits near..... | 198 | A xv |
| WATSON LAKE, TH. B. D. | | | Water power plant on..... | 13, 201 | A xv |
| Notes on, by Moore..... | 145 | A xvi | 68 | A xvi | |
| Hiawatha Gold Mining and Milling | | | photo..... | 168 | A xvi |
| Co. | | | falls, NATION RIVER. | | |
| Capital and date of charter..... | 9 | vii | Trenton limestone at..... | 108 | B xiii |
| Hibbard, H. N. | 135 | i | falls, ONAPING RIVER. | | |
| Hibbert tp., PERTH CO. | | | Tuff at..... | 131 | C xiv |
| Boring in, for salt. See Dublin. | | | falls, YORK BRANCH RIVER. | | |
| Hibernia iron mine, NEW JERSEY, | | | Photos of..... | 232, 233 | viii |
| U.S. | | | Waterpower at..... | 215 | viii |
| Ball-Norton separator used in... | 328 | xii | Falls pyrites mine, ST. LAW- | | |
| Concentrating process at, descrip- | | | RENCE CO., N. Y. | | |
| tion..... | 326 | xii | Plant at, notes on..... | 191 | A xvi |
| Minor ref. to | 240 | xii | Rock apatite m., W. PORT- | | |
| Hickey Oil Co. | | | LAND TP., OTTAWA CO., QUE. | | |
| Capital and date of charter..... | 26 | A xv | Pockets in, showing banded | | |
| Wells of, at Leamington..... | 116 | A xiv | structure..... | 441 | R C |
| Hickory. | | | Highgate, ORFORD TP., KENT CO. | | |
| Heating power of..... | 54 | B xv | Brick-yard at, notes and photos. | 73 | B xv |
| Hicks, Joseph | | | Highland co., U. S. | | |
| Captain, Ely mine..... | 71 | xi | Cincinnati group in..... | 116 | i |
| Mikado mine..... | 52 | ix | creek, SCARBOROUGH TP., YORK | | |
| 77 | | x | CO. | | |
| Manager, Triumph mine..... | 55 | viii | Iroquois beach in | 230 | A xiii |
| William | | | creek, HIGHLAND LAKE, REN- | | |
| Gold mining by, Sherbrooke tp.. | 112 | R C | FREW CO. | | |
| Iron mining by, Bagot tp..... | 275 | v | Syenite on..... | 224 | viii |
| Shareholder in Calabogie Co.... | 136 | R C | | | |

| | Page. | Vol. | | Page. | Vol. |
|--|--------|--------|--|----------|--------|
| Highland gold mine, Moss tp., Th.B.d. | | | Hilton, St. Joseph Island, L. Huron. | | |
| Minor refs. to..... | 25, 62 | R C | Terraces near..... | 199 A | xv |
| Notes on, by Plumber..... | 78 | v | Hinchinbrooke tp., Frontenac co. | | |
| ref. to..... | 79 | v | Apatite in..... | 194 | ix |
| Ore of, character..... | 124 | v | See also Blessington mines. | | |
| lake, Sebastopol tp., Renfrew co. | | | Corundum-bearing rocks in..... | 228 | viii |
| Rocks on..... | 224 | viii | Iron ore in. See Eagle lake. | | |
| Mining Co. | | | Limestone in..... | 46 | ii |
| Capital and date of charter..... | 9 | vii | Marcasite in..... | 203 | ix |
| Highwood mt., Montana, U. S. | | | Mica mining in. See Godfrey | | |
| Nepheline-syenite from..... | 209 | xi | mica mine. | | |
| Hildreth, James. | 53 | iv | Hincks tp., Ottawa co., Que. | | |
| | 56 | viii | Apatite deposits in..... | 436 | R C |
| Hiles, M. M. | 162 A | xiv | Hind, Prof. Henry Youle | | |
| Hill, Arthur. | 82 | xii | Description by, of storm on Lac | | |
| | 59 A | xv | des Mille Lacs..... | 119 | v |
| J. | | | Distances given by, Shebandowan | | |
| Brick-yard of, Madoc..... | 69 | B xv | Lake dist..... | 136 | v |
| Bros. | | | Extract from "Narrative of Red | | |
| Brick-yard of, Essex Centre... 63, 64 | | B xv | River Expedition" by..... | 168 | v |
| Hille, August. | 30 | vii | Notes by, on forest fires W. of | | |
| F. | | | Port Arthur..... | 205 | v |
| Assays by, of:— | | | Sketch by, of Fort Frances, 1857. 80, 81 | | v |
| copper ore, Tip Top m..... | 75 | v | Il.B.C. fort, Kenora. 128, 129 | | v |
| iron ore, Greenwater lake.... | 81 | v | Hinde Bros. | | |
| nickel ore, L. of the Woods... 249 | | ii | Brick-making by, Carlton West. 107 | | B xv |
| quartz, Rajah g. m..... | 28 | iii | Hinterland of Ontario. | | |
| quartz-porphry, Round lake. 75 | | v | Report, by Gibson, on surveys in. | | |
| Iron prospecting by, Port Arthur | | | | 101-138 | iv |
| dist..... | 20 | xii | ref. to..... | 5 | iv |
| Report by, on Mintog.m., ref. to. 72 | | A xiii | Hinton, W. P. | 106 | B xiii |
| Statement by, re:— | | | Hiram (BIBLICAL). | | |
| silver W. of Port Arthur, 1893. 181 | | iii | Brass casting by..... | 381 | R C |
| gold near Lee Blain, 1894... 231 | | iv | Walker | 45 | xii |
| Siderite reported by, W. of Port | | | Hirshfield, Julius. | 87 | x |
| Arthur..... | 142 | xi | Hiscock, R. C. | 197 | vi |
| Views of, re Animikie of Th.B.d. 148 | | ix | Hisingerite. | | |
| Hillebrand, W. F. | | | Elizabethtown tp..... | 199 | ix |
| Analysis by, of analcite-basalt... 173 | | viii | Hissarlik hill, near The Dardanelles. | | |
| Sudbury ores.... 158 | | C xiv | Ancient site of Troy..... | 167 | i |
| Hilliard, F. | | | Hist, F. and William | | |
| Brick-yard of, Renfrew..... | 97 | B xv | Brick-making by, Crediton.... 71 | | B xv |
| Hillier farm, east of Sarnia. | | | Hitch, J. | | |
| Oil pumping systems on..... | 107 | ix | Brick-yard at, notes..... | 73 | B xv |
| tp., Prince Edward co. | | | Hixon, A. B. | | |
| Beach in. See Wellington. | | | Mine captain, North Star mine.. 86 | | xii |
| Boring in, for gas..... | 152 | R C | Victoria mine.... 124 | | x |
| Hills, E., Sons & Co. | 122 | xi | | 65 | xi |
| Hilly lake, L. of the Woods, R.R.D. | 34 | vii | | 86 | xii |
| Hillyer, George H. | | | W. H. | | |
| Part owner, Lucky Coon g.m. 65, 156 | | v | Acknowledgments to..... | 58 | xii |
| President, American and Cana- | | | Manager, Victoria mines..... | 124 | x |
| dian G. M. Co..... | 129 | vii | | 65 | xi |
| | 81 | viii | | 58, 287 | xii |
| Vice President, Lucky Coon G.M. | | | | 72 | A xiv |
| Co. | 70 | ix | | 17, 142 | C xiv |
| J. S. | | | | 65 | A xv |
| Manager, Alice A. g. m..... | 129 | vii | Hjuljern, Sweden. | | |
| | 46 | viii | Wenstrom separator used at.... 328 | | xii |
| President, Lucky Coon G. M. Co. | 70 | ix | Hoath, James. | 200, 201 | iv |
| Vice President American and | | | Hobbs, Prof. William Herbert | 119, 120 | ix |
| Canadian G. M. Co..... | 81 | viii | Hobson, A. B. | 103 | vii |
| gold mine, L. of the Woods. | | | | 103 | viii |
| See Lucky Coon gold mine. | | | Robert. | 16 | v |
| Hilprecht, Prof. von Hermann. | 166 | i | | 15 | ix |
| Hilsen. | | | W. C. | 103 | vii |
| Pyrrhotite from, analysis..... 163 | | ii | Hocking co., Ohio. | | |
| | | | Coal of..... | 201 | i |
| | | | calorific power..... | 207 | ii |

| | Page. | Vol. | | Page. | Vol. |
|---|------------|--------|--|----------|------|
| Hockley, Frank | 50 | vii | Hogan, T. | | |
| Hodge, —? | 12, 85, 86 | ix | Iron prospecting by, E. of Port Arthur | 156 A | xv |
| Work by, for Montreal Mg. Co. . | 65 | iii | Thomas H. | | |
| Hodges, James | | | Gold mining by, The New Klon-dike | 72-75 | viii |
| Peat process of, analysis of fuel produced by, | 201 | ii | 63, 64 | ix | |
| notes, . . . 198, 199, 203-205 | | i | Iron mining by, Atikokan range. | 266 | xi |
| 197, 206 | | ii | Hogboem, —? | 190 | ix |
| 201 | | xii | Hogg, J. | 104 | vii |
| Peat suggested by, for iron smelt- ing | 209 | i | John S. | | |
| Hodgins, James A. | 38, 41 | A xiii | Peat making by | 23 | ix |
| King | 111 | ix | Hogsback, Rideau River. | | |
| tp., Alg. | | | Brick-yard at. See Harvard. | | |
| Country north of, character | 197, 198 | viii | Limestone quarries near, char- acter of stone | 37 B | xiii |
| Iron ore in, character, | 315 | xii | Hogue, Samuel | 45, 50 | x |
| mining. See Williams mine. | | | Holbrook, H. B.; L. J.; L. V. | 103 | vii |
| Hodgson, —? | | | 115, 116 | ix | |
| Peat drying process of | 193 | i | 142 | x | |
| R. T. | | | 74 | xi | |
| Manager, Canada Corundum Co. | 20 | ix | 66 | xii | |
| Work by, 1897 | 208, 235 | vii | Holden, Cyrus | 55 | xii |
| 1898. | 205, 214 | viii | L. C. | 95 | ix |
| W. F. | 104 | vii | Holding, Robert | 104, 195 | vii |
| Hoepfner, Dr. Carl | | | 116 | ix | |
| Nickel refining process of, | 221, 222 | ix | Hole-in-the-Wall, a defile in Tudor TP., Hastings Co. | | |
| See also next refs. | | | Rocks of, | 198 | xi |
| (or FRASCH) smelter, HAMILTON. | | | Holgate, W. A. | 142 | x |
| Secured for Cobalt ores. | 73 B | xiv | Holland, Charles | 54 A | xiii |
| Refining Co. | | | Norman B. | | |
| Attempt by, to smelt Sudbury ores. | 144 | C xiv | Mica trimming works of, Ottawa. | 105 A | xv |
| Hoerde iron process. | 92, 93 | ii | 91 A | xvi | |
| Hoffmann, G. C. | | | T. H. | | |
| Analysis and assays by, of:— | | | Extracts from report by, on cor- undum in India | 229-234 | viii |
| anthraxolite, Petitsikapau lake, Lab. | 2 Bull. | ii | Ref. to paper by, on mica deposits in India | 91 A | xiii |
| 162 | vi | | W. H. | 124 | x |
| breccia, Onaping river | 86 | i | and Emery Lumber Co. | 137 | vii |
| coal, Missinaibi river. | 125 | iv | and Holland. | 387 | R C |
| iron ore, Atikokan range. | 75 | ii | Holland. | | |
| Mattagami river. | 77 | ii | Peat in, use of | 193 | xii |
| 126 | iv | | industry in, notes | 215-217 | ii |
| limestone, Lanark tp. | 71 B | xiii | moss-litter from, price | 197 | ii |
| nickel ores, Sudbury dist. | 90 | i | Centre, Holland TP., Grey Co. | | |
| quartz, L. of Woods reg. | 25, 115 | R C | Marl near. See Williams lake. | | |
| Ledyard g.m. | 52 | iii | Landing, Gwillimbury E. TP., York Co. | | |
| Wanapitei lake | 27 | R C | Artesian water in | 59 | i |
| 92 | i | | river, Simcoe Lake. | | |
| tuff, near Whitson lake. | 132 | C xiv | Peat bog on, notes on | 190 | i |
| zinc-blende, Whitesand river. . . | 31 | R C | TP., Grey Co. | | |
| Description by, of:— | | | Clinton formation in | 48 B | xiii |
| amethyst, Anderdon tp. | 126 | xi | Marl in | 146 A | xiv |
| sonesite, Lillooet, B.C. | 151 | C xiv | See also William lake. | | |
| Examination by, of kaolin, Miss- inaibi river. | 127 | iv | Hollandia lead mine, NEAR BANNOCK- BURN, HASTINGS CO. | | |
| Hoffman, W. H. | | | Notes on, 1898 | 32 | viii |
| Notes by, on treatment of iron ore, Croton mine. | 339 | xii | 1903 | 94 A | xiii |
| Ref. to paper by, on iron mines of N.Y. | 237 | i | 1904 | 79 A | xiv |
| Hog bay, GEORGIAN BAY, L. HURON. | | | 1905. | 40, 91 A | xv |
| Drift west of, | 109 B | xiii | 1906 | 78 A | xvi |
| Hog (MOIRA) lake, HUNGERFORD TP. | | | Output of, 1904 | 15 A | xiv |
| Marble on | 63 B | xiii | Re-opened, 1903 | 11 A | xiii |
| Rocks on | 59 B | xiii | Rocks in | 199 | xi |
| Hogan, S. D. | 48 A | xiii | | | |

| | Page. | Vol. | | Page. | Vol. |
|---|----------|------|---|----------|------|
| Hollands, Charles J. | | | Homestake Gold Mg. Co. (of Ont.) | | |
| Notes by, on:— | | | Capital and date of charter..... | 11 | xi |
| Foley gold mine..... | 159 | v | Gold prospecting by, L. of the | | |
| L. of the Woods gold loca- | | | Woods..... | 235 | ii |
| tions..... | 260, | vi | <i>See also</i> Homestake gold mine, | | |
| timber at Fort Frances.... | 161 | v | mine, BLACK HILLS, U.S. | | |
| Holliday, W. | 116 | ix | Veins of, compared to veins in | | |
| Hollidayburg, PENN. | 236 | i | Fairbank tp..... | 225 | i |
| Hollingshead, Henry & Son. | | | Mining Co. | | |
| Oil working by, Dunwich tp.... | 16 | viii | Capital and date of charter..... | 9 | vii |
| Hollman, —? | | | Homewood sandstone. | | |
| Moss litter first made by..... | 187 | vi | Natural gas found in..... | 151 | rc |
| Peat process of, description.... | 214 | ii | Hominec. | | |
| Hollow lake, S. MUSKOKA RIVER. | | | Definition and preparation of.... | 199 | v |
| Allanite on..... | 193 | ii | Honduras. | | |
| | 193 | ix | Nickel coinage in..... | 161 | ii |
| =sand lake, FREDERICK HOUSE | | | Honeychurch, Charles | 32, 33 | vii |
| RIVER. | | | Honeysuckle. | | |
| <i>See</i> Frederick House lake. | | | Abitibi dist..... | 241 A | xiv |
| =sand river, NIGHT-HAWK LAKE, | | | Mattagami valley..... | 150 A | xv |
| NIP. | 181 | vi | Honor Bright Gold Mining Co. | | |
| =ware. | | | Capital and date of charter..... | 11 | xi |
| Canadian imports of, 1881-87.... | 251 | rc | Hood, —? | 140 | ie |
| Holly pump system. | 56 | i | Hook, Harry | 91 | xii |
| Holmes, —? | | | Hooker, D. D. | | |
| Gold developing by, near Dry- | | | Brick-yard of, Welland, notes | | |
| den..... | 55 A | xv | on..... | 104 B | xv |
| | 59 A | xvi | Hoehlihan, J. E. | | |
| John | | | Manager, Zenith zinc mine..... | 86 | ix |
| Oil on farm of, Raleigh tp..... | 97 A | xvi | Hooper, Thomas | | |
| J. A. | | | Evidence by, before R.C. <i>re</i> :— | | |
| Ref. to surveys by, Batchawana | | | Beaver silver mine..... | 198, 199 | rc |
| bay and northwards..... | 162, 163 | ix | iron ores, Port Arthur dist.... | 144 | rc |
| | 189, 190 | x | Michigan School of Mines.... | 426 | rc |
| M. M. | | | need of railways..... | 240 | rc |
| Part owner, Bad gold mine..... | 30 | iii | tariffs..... | 232 | rc |
| William | | | Manager, Beaver silver mine.... | 193 | rc |
| Land owner of present site of | | | | 225 | i |
| Paris, Ont..... | 114 | i | | 114 | ii |
| dock, RAINY RIVER, R.R.D. | | | Minor ref. to..... | 200 | rc |
| Indian relics from..... | 165 | v | Hoover and Jackson. | | |
| Holopon. | | | Limestone quarrying by, Orange- | | |
| Abitibi river..... | 187 | viii | ville..... | 99 | i |
| Kwataboahagan river, notes by | | | Hope, George | | |
| Parks..... | 187 A | xiii | Evidence by, before R.C. <i>re</i> :— | | |
| photo of sections | | | cost of English iron..... | 400 | rc |
| of facing..... | 192 | xiii | tariffs..... | 234 | rc |
| Holton, R. | | | James E. | 174 | v |
| Brick-yard of, Drew..... | 105 B | xv | lake, WEST OF RAINY LAKE, | | |
| producing, 1902..... | 29 | xii | R.R. D..... | 60 | iv |
| Holum, M. H. | 104 | viii | tp., DURHAM CO. | | |
| Holyoke, HAMDEN CO., MASS. | | | Beaches in. <i>See</i> Port Hope. | | |
| Water-power at..... | 485 | rc | Hopkins, Albert J. | 42 | vi |
| Home Gold and Copper Co. | | | Anna J. | | |
| Capital and date of charter..... | 9 | xii | Gold mining by, Michipicoten div. | | |
| Homer, GRANTHAM TP., LINCOLN CO. | | | | 101, 104 | viii |
| Iroquois beach at..... | 227 A | xiii | | 116 | ix |
| tp., TH. B. D. | | | Charles | 200 | rc |
| Iron ore north of..... | 314 | xii | H. J. | | |
| Tin "salting" in..... | 138, 139 | viii | Mining by, Michipicoten div.... | 104 | vii |
| Homestake gold mine, YELLOW- | | | | 101, 104 | viii |
| GILL BAY, L. OF THE WOODS, | | | | 116 | ix |
| R.R. D. | | | Samuel | | |
| Acquired by Dominion Gold Mg. | | | Boring by, for oil, Port Colborne. | 129 | i |
| and Red. Co..... | 174 | v | W. G. | 66 | xii |
| Notes on, 1892..... | 232 | ii | Hopkinson, Dr. John | | |
| | | | Ref. to work by, on nickel alloys. | 115 | viii |
| | | | Hoppins, Aaron | | |
| | | | Feldspar mining by, Bedford tp. | 26 | x |

| | Page. | Vol. | | Page. | Vol. |
|--|----------|--------|--|------------------|--------|
| Horbachite. | | | Hornstone (CHERT).—Con. | | |
| Composition of..... | 170 | ii | Michigan div., notes by J. M. Bell..... | 308-310 | A xiv |
| Horden mt., N. OF KAPISKASING LAKE, ALG. | | | Mode of occurrence..... | 196 | ix |
| Minor ref. to..... | 137 | ix | Horovsky, E. | 104 | vii |
| Photo of..... | 224, 225 | ix | Horse (s). | | |
| Horetzky, Charles G. | | | Bedding for. See Moss litter. | | |
| Statement by, re spruce on Moose river..... | 120 | iv | Moose factory..... | 107 | iv |
| Horn quarry, NEAR RIDGEWAY, BERTIE TP., WELLAND CO. | | | Horse-shoe(s). | | |
| Notes on..... | 118, 119 | B xiii | Canadian imports of, 1881-87.... | 251 | R C |
| silver. See Cerargyrite. | | | limestone quarry, St. MARYS. | | |
| Hornblende. | | | Fossils from..... | 151 | xii |
| Analysis of, S. Sherbrooke tp. . . | 227 | viii | Notes on..... | 96, 97 | B xiii |
| Ancient napkins made of..... | 95, 96 | iii | Photo of..... | 96, 97, 126, 127 | B xiii |
| Association of, with apatite. 438, 442 | | R C | Quarry Co. | | |
| Oso tp. | 439 | R C | Capital and date of charter..... | 37 | A xiii |
| N. Burgess tp. | 440 | R C | Horserace rapid, MADAWASKA RIVER. | | |
| Storrington tp. | 441 | R C | Corundum near..... | 223 | viii |
| Description of..... | 133 | iii | Horseweed. | | |
| Determination of..... | 535 | R C | Night-hawk lake..... | 123 | A xiii |
| Occurrences of crystals of..... | 205 | vi | Horton, James A. | | |
| Robert bay, Muskoka dist. | 199 | ix | Analysis by, of granite, Sudbury dist. | 120 | c xiv |
| granite. | 81 | B xiii | norite, Sudbury dist. | 124 | c xiv |
| Wabigoon Lake dist. | 183 | vii | tp., RENFREW CO. | | |
| porphyrite. | | | Marble quarries in. See Renfrew. | | |
| Astron bay, I. of the Woods, petrography..... | 46 | vii | Horwich, LANCASTER, ENG. | | |
| schist. | | | Peat at..... | 196 | i |
| French River dist. | 57, 68 | i | Charcoal from..... | 208 | i |
| Lake of Rays, sketch showing contact with gneiss..... | 167 | vii | Hospital. | | |
| Wabigoon Lake dist., character. 182 | | vii | Copper Cliff, photo..... | 87 | c xiv |
| Wanapitei lake, gold-bearing... 191 | | ii | Hotspur, MONMOUTH TP., HALIBURTON CO. | | |
| Gold Mg. and Exploration Co. | | | Nepheline-syenite near..... | 215 | viii |
| Capital and date of charter..... | 10 | ix | Hough, J. A. | 36 | A xvi |
| Licence to..... | 116 | ix | Houghton, Dr. Douglas | 93, 255 | A x |
| Work by, 1899..... | 112, 114 | ix | Jacob..... | 178 | ii |
| Horne, J. T. | | | Houghton, MICHIGAN, U.S. | | |
| Iron mining by, Rainy lake.... 266 | | xi | Beaches near..... | 175 | ix |
| Manager, Empress gold m. 266 | | v | Copper of, quality..... | 375 | R C |
| Mogotherim g. m. | 135 | vii | Glacial striae at, direction..... | 178 | ix |
| Man. Dir., Empress Gold Mg. Co. 56, 111, 263 | | vi | School of mines at..... | 426 | R C |
| Part owner, Norway g. m. | 31 | iii | contemplated..... | 512 | R C |
| Section given by, of tunnel near Sabawelake..... | 131 | xi | notes..... | 212, 213 | i |
| Hornellsville, STEUBEN CO., N.Y. | | | by Merritt..... | 507, 508 | R C |
| Paving clay from, analysis..... | 120 | iii | visited by Coleman, 1899. 144 | | ix |
| Hornick Farm Oil Co. | | | Hoverstate and Chase. | | |
| Oil production of..... | 100 | A xvi | Oil working in Romney tp. | 100 | A xvi |
| Horning and Brownscombe. | | | Howard, —? | 240 | ii |
| Pottery makers, Owen Sound... 118 | | B xv | tp., KENT CO. | | |
| Hornstone (CHERT). | | | Gas in..... | 123, 125 | i |
| Annaberg, Saxony..... | 61 | B xiv | | 29 | v |
| Corniferous formation..... | 46 | R C | Howe, Henry Marion | | |
| Definition of..... | 530 | R C | Views of, on titanite iron ores.... | 88 | ii |
| | 224 | vi | John | 28 | ix |
| | 166 | x | R. | 41 | A xv |
| Description of..... | 535 | R C | Brown & Co. | | |
| | 224 | vi | Labour employed by, statistics.. 370 | | R C |
| L. Huron, N. of (pebbles), notes by Coleman..... | 162 | viii | Steel output of, 1893..... | 119 | ii |
| Loon Lake dist., Th. B. d. | 258-260 | A xiv | island, FRONTENAC CO. | | |
| Marquette region, U.S., ferruginous..... | 185 | ix | Cambro-Silurian on..... | 43 | B xiii |
| | | | Clay on, stratified; rocks on.... 242 | | A xiii |
| | | | island, OFF MANITOULIN ISLAND. | | |
| | | | Clinton formation on..... | 78 | B xiii |
| | | | Howenstein, J. | 105 | x |
| | | | Howey, Dr. W. H. | | |
| | | | Nickel found by, Sudbury dist.. 134 | | c xiv |

| | Page. | Vol. | | Page. | Vol. |
|--|----------|--------|---|----------|--------|
| Howick tp., HURON CO. | | | Huckleberry hills, MADOC TP., HASTINGS CO. | | |
| Boring in, for salt. <i>See</i> Wroxeter. | | | Rocks of..... | 194 | xi |
| Limestone in..... | 35 | B xiii | granite..... | 198 | xi |
| Corniferous..... | 66 | B xiii | Hudson, A. | 104 | vii |
| Howland, C. H. | 104 | vii | "Hudson" s.s..... | 61, 63 | xi |
| Henry S. | | | 37 | A xiv | |
| Evidence by, before R.C. re :— | | | 37 | A xv | |
| charcoal iron..... | 396 | R C | Hudson bay. | | |
| iron, Snowden tp..... | 234 | R C | Fisheries and furs of..... | 133 | iv |
| railway subsidies..... | 242 | R C | Glaciation W. of..... | 90 | v |
| Owner of Howland iron mine..... | 61 | ii | Jasper ores on and near..... | 93 | v |
| O. A. | 225 | i | 200 | x | |
| iron mine, SNOWDON TP., HALIBURTON CO. | | | Minerals south of, paper by Gib- | | |
| Evidence re, before R.C. | 61 | ii | son..... | 124-128 | iv |
| Cost of working..... | 388, 389 | R C | Navigation of, notes..... | 131, 132 | iv |
| Cross-section of..... | 131 | R C | Rocks of, Archaean..... | 193 | v |
| Notes on, by C. S. Pusey..... | 131 | R C | Palaeozoic..... | 7 | R C |
| Ore of, analysis..... | 62 | ii | 246 | v | |
| value..... | 335 | R C | Huronian..... | 17 | R C |
| tp., MANITOULIN ISLAND. | | | Water of, temperature..... | 107 | iv |
| Boring in, for iron..... | 43, 45 | A xii | Hudson Bay Extended, Ltd. | | |
| Howrigan, John | 72 | A xiii | Capital and date of charter..... | 28 | A xvi |
| Howse iron mine, BEDFORD TP., FRONTENAC CO. | | | Hudson Bay slope. | | |
| Early mining at..... | 43, 44 | ij | Iron ores on, probability of... 77, 78 | ii | |
| Notes on, by Vennor..... | 49 | ij | Notes on, by Burwash..... | 176-181 | vi |
| Hoyle tp., ALG. | | | Cobalt Mg. Co. | | |
| Minor ref. to..... | 221 | A xiv | Capital and date of charter..... | 29 | A xvi |
| Soil from, description..... | 134 | A xiii | Oil Producers, Ltd. | | |
| Trees in..... | 123 | A xiii | Capital and date of charter..... | 28 | A xvi |
| Hoyt, J. H. | 142 | x | river, N. Y. | | |
| | 74 | xi | Glaciation on and near..... | 32 | B xv |
| HP 259, 304, 305, 384 gold locs. | | | Troquois beach..... | 233 | A xiii |
| <i>See</i> Swede Boys mine. | | | Hudson River formation named | | |
| 267 gold loc. See Quacken- | | | after..... | 43 | R C |
| bush, V. | | | Iron mining on..... | 107 | ii |
| 301 gold loc. See Jubilee gold | | | Hudson River formation. See Lorraine | | |
| mine. | | | formation. | | |
| 366-369 gold locs. See Big | | | straits. | | |
| Master gold mine. | | | Navigation of, notes..... | 131, 132 | iv |
| 370-389 gold locs. See Kish- | | | tp., Nip. | | |
| kutena gold mine. | | | Conglomerate in..... | 46 | B xiv |
| 405 gold loc. See Gold Rock | | | Iron in..... | 30 | B xiv |
| gold mine. | | | Malachite in..... | 54 | A xvi |
| 467 gold loc., NEAR JACKFISH | | | Minerals in..... | 44 | A xv |
| LAKE, TH. B. D. | | | Nicolite and smaltite in..... | 51 | B xiv |
| Notes on..... | 87 | x | Hudson's Bay Co. | | |
| 498 gold loc., RESERVE ISLAND, | | | Dead river, Michipicoten river, | | |
| SEINE RIVER..... | 75 | vi | formed by..... | 177 | A xv |
| 676-679 gold locs. See Jack | | | Fishing industry of..... | 133 | iv |
| Lake gold mine. | | | Government by..... | 134, 135 | iv |
| Hub gold mine, NEAR WANAPITEI | | | Historical notes..... | 196 | v |
| LAKE, NIP..... | 140 | vii | Influence of, on Indians..... | 134 | iv |
| Gold Mining and Develop- | | | Iron prospecting by, Nipigon lake. | 214 | x |
| ment Co. | | | Policy of, against settlers..... | 204 | v |
| Capital and date of charter..... | 9 | vii | Posts of :— | | |
| Hubbell, A. C. | | | Abitibi lake..... | 227 | xi |
| Gold mining by, Rathbun tp.... | 87 | vii | Agawa river, L. Superior..... | 131 | viii |
| President, Golden Star Mg. & Ex. | | | Bear island, Timagami lake... 58 | R C | |
| Co..... | 45, 76 | viii | 161 | x | |
| Huber, Allen | | | Charlton island..... | 178 | A xiii |
| Experiments by, on peat for fuel. | 190 | i | Fort Frances, nomenclature... 40 | iv | |
| Huckleberries. | | | Matachewan..... | 110 | A xiii |
| Abitibi dist..... | 253 | A xiv | 240 | A xiv | |
| Wabigoon Lake dist..... | 176 | vii | photo of factor and | | |
| | | | family..... | 184, 185 | viii |

| | Page. | Vol. | | Page. | Vol. |
|---|---------------|------|---|--------------|------|
| Hudson's Bay Co.—<i>Con.</i> | | | Hull landing, STONY LAKE, PETER- | | |
| Posts of <i>Con.</i> | | | BOROUGH CO. | | |
| Fort Mattagami | 127 | ix | Mica-granite at..... | 213 | viii |
| | 121 A | xiii | tp., OTTAWA CO., QUE. | | |
| | 240 A | xiv | Iron in, compared with that of | | |
| | 116 A | xv | Hastings co..... | 51 | ii |
| chalcopyrite near..... | 196 | ix | mining | 32, 34 | ii |
| Ground-hog lake | 115 | iv | with crystalline limestone..... | 53 | ii |
| | 131 | ix | Humber bay, TORONTO. | | |
| Kapiskasing lake, Alg..... | 137 | x | Brick-making at, notes..... | 110 B | xv |
| Lac Seul..... | 92, 93 | v | Humber river, YORK CO. | | |
| gold reported at..... | 47, 61 | v | Fire-clay on..... | 54 | R C |
| jasper pebbles at..... | 74 | v | Hudson River shale on..... | 177 | i |
| latitude..... | 62 | v | | 127 | iii |
| Lake of the Woods..... | 92 | vi | | 126 B | xiii |
| Kenora, notes..... | 168-171 | v | Iroquois beach on..... | 229 A | xiii |
| photo..... | 128, 129 | v | Medina shale on, for vitrified | | |
| Long Point island..... | 185 | v | brick..... | 16 | v |
| Little Wabigoon lake..... | 54 | v | Sand and clay on..... | 230 A | xiii |
| Michipicoten..... | 13 Bull. | iii | Humberstone, HUMBERSTONE TP., | | |
| | 241 | v | WELLAND CO. | | |
| 100, 101, 185, 201, 202, 206 | vi | | Gas in and near..... | 130, 131 | i |
| abandoned..... | 298 A | xiv | <i>See also</i> Humberstone tp. | | |
| Missinaibi..... | 185 | vii | supplied to..... | 44 | xi |
| Montizambert..... | 242 | v | | 91 A | xiv |
| Moose factory..... | 178 A | xiii | Limestone from, analysis..... | 152 | xii |
| notes by Parks..... | 191, 192 | viii | tp., WELLAND CO. | | |
| photo..... | 200, 201 | viii | Gas in..... | 102 A | xiv |
| New Brunswick House..... | 139 | x | | 108 A | xv |
| New Green lake, Alg..... | 157, 167 | xii | boring for..... | 52, 53 | xii |
| New Post, Abitibi river..... | 186 | viii | | 27, 28 A | xv |
| photo..... | 200, 201 | viii | notes on..... | 128-131 | i |
| Pic river..... | 13 Bull. | iii | <i>See also</i> Port Colborne. | | |
| Pishkanogami lake..... | 131 | ix | Limestone in, Corniferous..... | 34 | xi |
| Pither pt., Rainy lake..... | 162 | v | <i>See also</i> Sherkston. | | |
| Poplar Lodge, Nipigon lake..... | 212 | x | kilns and quarries. <i>See</i> | | |
| abandoned..... | 106 A | xvi | Port Colborne. | | |
| Post lake, Vermilion river..... | 258 | vii | Onondaga formation in..... | 117 B | xiii |
| Sandy lake, R.R.d..... | 170 | vii | Peat, in..... | 191 | i |
| Savant lake, abandoned..... | 89, 90, 313 | xii | | 33 | iv |
| Ship Hole, James bay..... | 129 | ix | <i>See also</i> Welland. | | |
| Sturgeon river, L. Nipigon. | | | Humboldt, Alexander von | | |
| 107, 110, 118 A | xvi | | Notes by, on political economy.. | 9 | iv |
| lake, Th. B. and R. | | | School of Mines established by.. | 498 | R C |
| R.d..... | 165, 176, 177 | vii | Humboldtine. (IRON OXALATE). | | |
| | 139, 149 | xi | Kettle pt..... | 194 | ii |
| Timiskaming lake..... | 41 B | xiv | | 108 | ix |
| Wanipitei lake..... | 168 | vi | Humphrey, S. E. | 132 | i |
| photo..... | 176, 177 | vi | Humphreys, A. E. | 43 | iii |
| Huelva prov., SPAIN. | | | Robert. | 61 | viii |
| Pyrites deposits in..... | 192 A | xvi | Hungary. | | |
| Hugesson, C. M. Knatchbull | 9 | vi | Gas-tying of wood in, for iron | | |
| Hughes Bros. | | | smelting..... | 484 | R C |
| Iron mining by, near Wallace | | | Peat drying process in..... | 194 | i |
| mine..... | 142 | R C | Hungerford, W. A. | | |
| and Bangs. | 28 | xii | Director, Atlas Arsenic Co..... | 91 | ix |
| Hugo Von Hagen Co. | | | | 62, 167, 234 | xi |
| Capital and objects of..... | 43 A | xvi | | 110 | xii |
| Hulbert, J. H. | | | Manager, Craig gold mine..... | 93 A | xiii |
| Analysis by, of iron ore, Palmer- | | | | 76 A | xiv |
| ston tp..... | 81 | ii | | 40, 42 A | xv |
| Hull, OTTAWA CO., QUE. | | | Oliver pyrites m.... | 30, 159 A | xvi |
| Cement plant at, limestone for.. | 37 B | xiii | Marble Co. | | |
| <i>See also</i> International Portland | | | Capital of..... | 235 | R C |
| Cement Co. | | | Notes on, by the Manager. 80-82, | 235 | R C |
| Smelter at, notes by F. Miller... | 396 | R C | | 62-64 B | xiii |
| Hull, YORKSHIRE, ENGLAND. | | | Mills, HUNGERFORD TP., HAST- | | |
| Apatite shipments to, 1884-85... | 443 | R C | INGS CO. | | |
| | | | Trenton formation near..... | 59 B | xiii |

| | Page. | Vol. | | Page. | Vol. |
|---|-------------|--------|---|---------------|-------|
| Hungerford pyrites mine, HUNGERFORD TP., HASTINGS CO. | | | Hunt, Dr. T. Sterry <i>Con.</i> | | |
| Depth at which pyrites was met. | 186 | A xvi | Corundum found by, Lanark co. | 242, 243 | viii |
| Notes on, 1905 | 91 | A xv | Geological nomenclature by | 4 | R C |
| 1906 and photos of plant. | 79, 80, 197 | A xvi | Log of well at Thamesville given by | 110 | A xiv |
| Ore at, broken by hand | 191 | A xvi | Magnetic separation of iron ores suggested by | 346, 491 | R C |
| Originally worked for gold | 185 | A xvi | Name "Huronian" suggested by | 70 | i |
| Work suspended | 201 | A xvi | Nickel found by, Sudbury dist. (1856) | 135 | xii |
| Worked as a pyrites mine | 157 | A xvi | Wallace mine | 233 | i |
| tp., HASTINGS CO. | | | Notes by, on:— | | |
| Actinolite in | 52 | R C | Blairton iron mine | 43 | ii |
| | 91 | iii | cobaltiferous ore, Whitetfish river | 60 | B xiv |
| | 102 | ix | copper-bearing rocks of L. Superior | 133, 134 | vii |
| | 27 | xi | Hodge's peat-drying process | 198, 199, 209 | i |
| Copper pyrites in | 133 | R C | iron ores, occurrences of | 471, 472 | R C |
| Gold in | 54 | iii | natural gas in Que. | 126 | i |
| Iron pyrites in | 133 | R C | oil-fields of Canada | 143 | i |
| | 207 | ix | Pyroxenite named by | 437 | R C |
| mining | 19 | A xiv | Prophecy by, <i>re</i> cobalt in Canada | 4, 61 | B xiv |
| | 20 | A xv | References to:— | | |
| 79, 150, 157-159 | A xvi | | experiments by, on iron sand | | |
| <i>See also</i> Hungerford m. | | | of St. Lawrence | 325 | xii |
| Oliver m. | | | "Notes on Iron Ores of Canada" by | 340 | xii |
| Mica in | 203 | ix | papers by, on peat | 197 | ii |
| mining | 149 | R C | | 206 | ix |
| Marl in. <i>See</i> Dry lake. | | | salt-producing | | |
| Quarries in, limestone | 61 | B xiii | 184, 185, 189 | R C | |
| marble, exhibited at | | | statement by, <i>re</i> well in London, Ont. | 60 | i |
| Pan-American Exhibition | 87 | xi | Views of, <i>re</i> :— | | |
| <i>See also</i> Crookston. | | | origin of apatite | 438, 443 | R C |
| Rocks in, garnetiferous schist | 160 | A xvi | gas and oil | 115 | i |
| Trenton | 59 | B xiii | metalliferous veins | 94 | A xiv |
| Western Extension Pyrites mine, HUNGERFORD TP., HASTINGS CO. | | | original rocks of the earth | 65 | i |
| Notes on, by Fraleek | 159, 160 | A xvi | Hunter, Edward | | |
| Hungry bay, L. St. FRANCIS, QUE. | | | Molybdenite on farm of, near Calabogie | 55 | xii |
| Calcareous formation on | 47 | B xiii | J. C. | | |
| Hunsiker, Millard | 22 | xi | Iron mining by, Atikokan river | 131 | xi |
| Hunt, H. B. | 44, 68 | viii | Manager, Atikokan Iron Co. | 59 | A xv |
| J. | 104 | viii | President | 61 | A xvi |
| | 116 | ix | Vice-President | 13 | A xiv |
| | 142 | x | James | | |
| | 74 | xi | Apatite mining by, Storrington tp. | 170 | R C |
| | 66 | xii | M. T. | | |
| | 48 | A xiii | Manager, Rajah gold mine | 28 | iii |
| Dr. T. Sterry | | | Stella | 281 | viii |
| Analyses and assays by, of:— | | | Sultana | 248-251 | vi |
| anorthosite, Ottawa | 226 | viii | 43, 50 | viii | |
| dolomite, Panache lake | 83 | i | Wendigo | 71 | ix |
| iron ores, Bastard tp. | 35 | ii | Notes by, on | 44 | ix |
| Gros cap | 145 | viii | R. M. | | |
| Hastings dist. | 41, 54 | ii | <i>See also</i> Atikokan Iron Co. | | |
| Hull, Que. | 35 | ii | Hunter Bros. | | |
| Little Pic river | 37 | R C | Iron mining by, Atikokan range | 35 | x |
| Pic river | 313 | xii | | 131, 266 | xi |
| Wallace mine | 63 | ii | | 13 | A xiv |
| limestone, Panache lake | 29, 30 | B xiii | | | |
| nickel ore, Sudbury dist. | 88 | i | | | |
| | 3 | C xiv | | | |
| peristerite, Bathurst tp. | 206 | ix | | | |
| Anorthosite near Ottawa described by | 226 | viii | | | |
| Apatites described by, 1848 | 436 | R C | | | |
| found by, in Silurian | 194 | ix | | | |
| Asbestos defined by | 93 | iii | | | |
| Cobalt found by, L. Huron | 7 | A xvi | | | |

| | Page. | Vol. | | Page. | Vol. |
|--|--------|--------|----------------------------------|---------------|--------|
| Hunter, Samuel | | | Huron co.—Con. | | |
| Foreman, Stoness mica mine.... | 134 | x | Corniferous formation in..... | 25 | B xiii |
| Manager, Richardson corundum | | | Eric clay in, character..... | 126 | iii |
| mine..... | 137 | xii | Limestone in, notes by Miller... | 66 | B xiii |
| Bros. | 111 | x | Salt works in, number, 1897..... | 24 | vii |
| Murray and Cleveland. | | | 1898..... | 17 | viii |
| Contractors for Welland Canal | | | Copper Bay claim, NEAR | | |
| aqueduct..... | 73 | B xiii | BRUCE MINES, ALG. | | |
| Quarrying by, Niagara tp..... | 96 | i | Notes on, by Bell..... | 23 | RE |
| Cobalt Silver Mg. Co. | | | Huronian. | | |
| Capital and date of charter..... | 29 | A xvi | Break in, important..... | 185 | ix |
| Island, R. R. D. | | | Canada, area and thickness..... | 195 | v |
| Couchiching formation in..... | 47 | iv | distribution..... | 204 | v |
| Iron ore on..... 22, 61, 125, | 126 | RC | notes by Bell 245, 246 | v | |
| 88 | | i | Characteristics of..... | 16, 17 | RC |
| 123 | | iv | Definition of..... | 535 | RC |
| 304, 309 | | xii | Distinction and relationship of, | | |
| 8 | | A xiii | with Laurentian..... | 94 | v |
| 114 | | A xvi | Distribution of..... | 18-22 | RC |
| Vermilion range..... | 65 | ii | 169 | | i |
| 200 | | x | and minerals of. 123, 124 | iv | |
| 24, 128 | | xi | Economic importance of..... | 22-31 | RC |
| Hunter street, HAMILTON. | | | 249 | | v |
| Mammoth remains in..... | 236 | A xiii | prospecting in, advisable. | 5 | v |
| Stratified deposits beneath..... | 228 | A xiii | Gold in..... | 191 | ii |
| Huntliffe. | | | talcose slates..... | 451 | RC |
| Port Arthur dist..... | 55, 58 | B xiv | Keewatin, Lac Seul..... | 54 | v |
| Silver islet..... | 33 | RC | Iron ranges of Lower, report by | | |
| 191 | | ii | Coleman..... | 181-212 | x |
| 200 | | ix | Lakes Superior and Huron, W. | | |
| Huntingdon, GODMANCHESTER TP., | | | of, notes by International Com- | | |
| HUNTINGDON CO., QUE. | | | mittee..... | 274-276 | A xiv |
| Peat at..... | 198 | ii | Mixed with Laurentian..... | 7, 8 | RC |
| Huntingdon, HASTINGS CO. See West | | | Name of, derivation..... | 18 | RC |
| Huntingdon. | | | given by Logan..... | 4 | RE |
| tp., HASTINGS CO. | | | meaning..... | 70 | i |
| Calcite in..... | 195 | ix | Notes on, by Coe..... | 467 | RC |
| See also Kane mine. | | | Selwyn..... | 65-68 | RC |
| Beach in. See West Huntingdon. | | | Paper on, by Coleman (Western | | |
| Iron in, hematite..... | 199 | ix | Ont.)..... | 151-161 | vii |
| mining..... | 97 | vii | Petrographical notes..... | 154-156 | vii |
| Marble quarrying in. See Crook- | | | Quebec prov. | | |
| ston. | | | Mistassini lake..... | 18 | RC |
| Marl from, analysis..... | 66 | B xiii | Timiskaming lake..... | 174 | ix |
| Mica mining in, idle, 1901..... | 28 | xi | photo..... | 49 | B xiv |
| Talc production of, 1905..... | 21 | A xv | Relation of, to Laurentian..... | 209 | vii |
| See also Henderson mine. | | | Relations of Lower and Upper, | | |
| Huntington, Prof. A. K. | | | notes by Coleman..... | 182-184 | ix |
| Notes by, on iron smelting..... | 476 | RC | United States. | | |
| Huntley, Robert | | | L. Superior, relation to the | | |
| Chief engineer, Regina g. m. 253, 255 | | vi | syncline..... | 77 | iii |
| tp., CARLETON CO. | | | Michigan and Wisconsin..... | 246 | v |
| Cambro-Silurian in..... | 37 | B xiii | | | |
| Mica prospecting in. See Carp. | | | | | |
| Peat in..... | 190 | i | Algoma dist. | | |
| 198 | | ii | Frederick House river, con- | | |
| Huntsman smelting process. | xxi | i | tact with Laurentian..... | 178 | viii |
| 362 | | RC | L. Huron, report by Coleman. | | |
| Huntsville, CHAFFEE TP., MUSKOKA | | | 157-163 | | viii |
| DIST. | | | to L. Wanapitei.... | 169 | vi |
| Brick-yard at, notes..... | 89 | B xv | Mattagami valley.... | 121, 131, 132 | A xv |
| Hurd cape, BRUCE CO. | | | Michipicoten div..... | 137 | viii |
| Rocks on..... | 36 | B xiii | contact with Laurentian.. | 188 | vii |
| Niagara formation..... | 50 | B xiii | 151 | | xi |
| Hurley, Col. Thomas J. | 159 | v | Dog river..... | 140 | viii |
| Huron co. | | | Wawa lake..... | 146 | viii |
| Brick works in, notes on..... | 70, 71 | B xv | notes by Willmott.. | 7 Bull. | iii |
| Chemung and Portage formation | | | by Coleman. 157, 158 | | viii |
| in..... | 47 | RC | report by J.M. Bell. | | |
| | | | 278-355 | | A xiv |

| | Page. | Vol. |
|--|----------|--------|
| Huronian.—Con. | | |
| Algoma dist.— <i>Con.</i> | | |
| Missinaibi river..... | 194, 195 | viii |
| Mississagi dist..... | 170-172 | xii |
| Niven's base line and south of. | 141 | ix |
| Paper by Bell..... | 63-94 | i |
| St. Joseph island, N. of, contact with Silurian..... | 38 | iii |
| Sudbury dist. | | |
| character..... | 2, 4, 9 | c xiv |
| Copper Cliff, contact with | | |
| Laurentian..... | 145 | vii |
| Creighton tp..... | 45, 46 | iii |
| cut by diabase dikes..... | 435 | R C |
| divisions of..... | 14 | c xiv |
| Geneva lake..... | 222 | A xiii |
| sediments..... | 86-100 | c xiv |
| petrography..... | 127-134 | c xiv |
| Vermilion River valley.. | 154, 155 | x |
| Nipissing dist. | | |
| Abitibi region..... | 218 | A xiv |
| Abitibi river..... | 193 | viii |
| Black river..... | 180 | viii |
| | 186 | xii |
| Boston tp..... | 262 | A xiv |
| Cobalt div..... | 27, 28 | B xiv |
| description..... | 40, 41 | B xiv |
| notes and photos..... | 47-49 | B xiv |
| Larder lake, notes & photos. | 210-214 | A xvi |
| section showing.. | 205 | A xvi |
| Meteor lake..... | 157-159 | x |
| Otto tp., contact with Lauren- | | |
| tian..... | 178 | xii |
| Timagami Lake dist..... | 56, 57 | R C |
| | 162-165 | x |
| Vermilion river..... | 257 | vii |
| Wanapitei Lake dist..... | 137 | vii |
| | 221 | A xiii |
| Rainy River dist. | | |
| auriferous..... | 180 | vii |
| Clearwater lake..... | 131 | vii |
| Lake of the Woods:— | | |
| contact with Laurentian.... | 25 | iii |
| 100, 102, 110, 111, 115, 119 | | vi |
| | 146 | vii |
| map showing..... | 12 | iii |
| Little Turtle river, contact | | |
| with Laurentian..... | 129 | vii |
| Notes by Coleman..... | 4 Bull. | i |
| | 114-124 | vi |
| Rainy Lake reg., arrangement | | |
| and distribution..... | 47-50 | iv |
| Sandy lake..... | 55 | v |
| Seine River reg..... | 77 | vi |
| Thunder Bay dist. | | |
| Animikie iron range, notes by | | |
| Silver..... | 159, 160 | A xv |
| Kakabeka falls, contact with | | |
| Animikie..... | 129 | xi |
| Lac des Mille Lacs..... | 72 | vi |
| Lake Superior, Jackfish bay.. | 189 | v |
| report by Coleman..... | 163-168 | viii |
| Loch Earn..... | 81 | v |
| Magnetic lake, near..... | 73 | v |
| Moss tp..... | 62, 106 | R C |
| Nipigon Lake reg..... | 311 | xii |
| conglomerate, 112, 113, 146, 147 | | A xvi |
| Shebandowan Lake reg..... | 74, 75 | v |

| | Page. | Vol. |
|--|----------|--------|
| Huronian.—Con. | | |
| Thunder Bay dist.— <i>Con.</i> | | |
| Sturgeon Lake dist., notes by | | |
| McInnes..... | 88 | xii |
| belt, The Great | | |
| Geology of, paper by Bell..... | 70-84 | i |
| Rocks northwest of..... | 68, 69 | i |
| co. | | |
| Objects of, work by..... | 71 | A xiv |
| Plant and power of..... | 62 | A xv |
| completed..... | 13 | A xv |
| Cobalt Silver Mfg. Co. | | |
| Capital and date of charter..... | 29 | A xvi |
| gold mine, Moss tp., Th. B. D. | | |
| Discovery of..... | 25 | R C |
| Notes on, by Bell..... | 124 | v |
| Blue..... | 121-125 | v |
| Cattanaeh..... | 241 | R C |
| Coleman, McDer- | | |
| mott & Plummer, 76, 78 | | v |
| McKellar..... | 115 | R C |
| | 123 | v |
| Purchase price of..... | 116 | R C |
| Road to serve, built by Govt.... | 9 | vi |
| Rocks of, Huronian..... | 62, 106 | R C |
| Sale price of..... | 241 | R C |
| Silver in..... | 28 | R C |
| Specimens from, to Colonial and | | |
| Indian Exhibition..... | 266 | v |
| Sylvanite in..... | 38, 40 | iv |
| | 210 | ix |
| Tellurium in..... | 38 | iv |
| Veins in, character..... | 117 | vi |
| width..... | 66 | R C |
| Mining Co. | | |
| Capital and date of charter..... | 9 | vii |
| Huronite. | | |
| Missinaibi..... | 200 | ix |
| Sudbury, near..... | 194 | ii |
| Hurontario, NOTTAWASAGA TP., SIM- | | |
| COE CO. | | |
| Limestone at..... | 109 | B xiii |
| Hurricanes. See Storms. | | |
| Hursley, C. F. | 104 | vii |
| Jay | 104 | vii |
| Husgafvel blast furnace. | | |
| Description and notes on.... | 486-488 | R C |
| Possibility of using, in Ontario.. | 396 | R C |
| Hussey, J. | 142 | x |
| Husson, Jane. | 104 | viii |
| W. | 104 | vii |
| | 104 | viii |
| | 115 | ix |
| | 113, 142 | x |
| | 74 | xi |
| | 66 | xii |
| Huston, James. | 80 | ix |
| Joseph | 94 | viii |
| copper mine, MONTGOMERY TP., | | |
| ALG. | | |
| Operations at, 1902..... | 98 | xii |
| Hut lake, W. OF STURGEON LAKE, R. | | |
| R. D. | | |
| Fahlbands near, mineralized.... | 176 | vii |
| Schists on..... | 165 | vii |
| Striae on..... | 173 | vii |
| Hutchins, C. H. | 252 | xi |
| Hutchison, Archie. | 41 | viii |

| | Page. | Vol. | | Page. | Vol. |
|--|----------|--------|--|------------|--------|
| Ickta lake , GALBRAITH TP., ALG. | | | Imperial and Colonial Institute | 4 | vii |
| Description of: veins around: | | | Bank . | | |
| map of..... | 39, 40 | iii | Photo of, at Cobalt..... | 68 | B xiv |
| Gold mining on. <i>See</i> Ophir mine. | | | Cement Co. | | |
| Rocks on..... | 41 | iii | Analysis of clay and marl used | | |
| Ida mt. , ADKAMYTI GULF, ASIA Mi- | | | by..... | 183 | A xiv |
| NOR..... | 167 | i | Notes on, 1900..... | 16, 17 | x |
| Iddings, Prof. J. P. | 121 | A xiii | 1902..... | 17, 18 | B xiii |
| <i>Idc.</i> | | | 1904 and photo of plant. | 144-146 | A xiv |
| Meaning of, as a termination. . . | 447 | R C | Operating, 1901..... | 32 | xi |
| ideal gold m. , VAN HORNE TP., | | | 1902..... | 31, 32, 35 | xii |
| R. R. D. | | | 1903..... | 17 | A xiii |
| Notes on, 1903..... | 66 | A xiii | 1905..... | 17 | A xv |
| 1904..... | 51 | A xiv | 1906..... | 20 | A xvi |
| 1905..... | 55 | A xv | | | |
| Shut down, 1906..... | 59 | A xvi | Cobalt Silver Mines Co. | | |
| Gold Mining Co. | | | Capital and date of charter..... | 28 | A xvi |
| Work by, Van Horne tp..... | 66 | A xiii | Copper Co. of Parry Sound. | | |
| <i>See also</i> last ref. | | | Capital and date of charter..... | 10 | ix |
| Idocrase. <i>See</i> Vesuvianite. | | | Copper mining by, Foley tp..... | 168 | ix |
| Idria quicksilver mine , AUSTRIA. | | | Corundum Co. | | |
| Arsenic in..... | 101 | xi | Capital and date of charter..... | 11 | xi |
| Ignace , RAINY RIVER DIST. | | | gold mine , HELL-DIVER BAY, | | |
| Geology of vicinity..... | 161, 162 | vii | L. OF THE WOODS. | | |
| Gold near..... | 71 | iv | Idle, 1900..... | 79 | x |
| Granite quarries at..... | 129 | xi | Notes on, 1899..... | 57, 58 | ix |
| Moraine near..... | 172 | vii | Photo..... | 64, 65 | ix |
| Road from, to Sturgeon Falls, | | | gold mine , MANITOU LAKE | | |
| built by Govt..... | 9 | vi | DIST., R.R.D..... | 92 | xii |
| Route from, to Sturgeon lake. | | | iron mine , SNOWDENT P., HALL- | | |
| 147, 148 | | xi | BURTON CO. | | |
| Igneous rocks. | | | Analysis of ore from..... | 62 | ii |
| Classes of, in Ont..... | 237 | viii | Cost of working ore from... 388, 389 | | R C |
| Classification and description of, | | | Notes on, by Pusey..... | 131 | R C |
| by Miller..... | 232-234 | vi | Land and Mfg. Syn. | | |
| Mode of formation..... | 229, 230 | vi | Capital and date of charter..... | 10 | vii |
| Illinois , U. S. | | | Land Co. | | |
| Brick pavements in cities of | | | Analysis of clay used by..... | 15, 27 | B xv |
| 108, 109, 112, 113 | | iii | Brick-making by, Sturgeon Falls. | 84 | B xv |
| Geological survey of, notes by | | | Natural Gas, Ltd. | | |
| Walker..... | 421 | R C | Capital and date of charter..... | 5 | xii |
| Iron industry in, 1891..... | 127 | ii | Gas wells at Bow Park farm | | |
| growth of..... | 327 | R C | leased to..... | 108 | A xiv |
| Shales of, analyses..... | 120 | iii | Oil Co. | | |
| Steel Co. | 111 | ii | Borings by, in Lambton field... 24 | A xiii | |
| University. | | | Effect of formation of, in Petrolea. | 40 | xi |
| Notes on, by Richards..... | 511 | R C | Exhibit of, at Pan-American Ex- | | |
| Ilmen mt. , NOVGOROD DEP., RUSSIA. | | | hibition..... | 86, 90 | xi |
| Minerals of..... | 213 | vii | Operating, 1897..... | 17 | vii |
| Ilmenite. <i>See also</i> Titaniferous iron | | | 1902..... | 40 | xii |
| ores. | | | Output of, 1905..... | 22 | A xv |
| Baie St. Paul, Que., containing | | | Plant of, at Sarnia..... | 18 | x |
| nickel..... | 231 | vii | notes on..... | 101 | A xvi |
| Definition of..... | 536 | R C | Purchasers of oil in the Tilbury | | |
| Determination of..... | 204, 215 | vi | and Romney fields..... | 94, 104 | A xvi |
| Hardness of..... | 202 | vi | Statistics by, 1906..... | 24, 95 | A xvi |
| Magnetic permeability of..... | 324 | xii | Paper Mills. | | |
| Occurrences of..... | 200 | ix | Pulp mill of, at Sturgeon Falls.. 14 | A xv | |
| Specific gravity of..... | 202 | vi | Peat Fuel Co. | | |
| Ilseberg , BRUNSWICK, GERMANY. | | | Formation of..... | 28, 37 | A xiii |
| Ancient foundry at..... | 356 | R C | Plaster Co. | | |
| Ilyaita (LIEVRITE or YENITE). | | | Capital and date of charter..... | 9 | xii |
| Ottawa, near..... | 191 | ii | Products of..... | 21 | A xiii |
| 201 | | ix | Portland Cement Co. | | |
| Imogen river , L. SUPERIOR. | | | Exhibits of, at Pan-American Ex- | | |
| Quartz veins near..... | 353 | A xiv | hibition..... | 88 | xi |
| Rocks near mouth of..... | 349 | A xiv | Pulp and Paper Co. | | |
| Impatiens fulva. | | | Brick-making by, Sturgeon Falls. | 84 | B xv |
| Abitibi Lake dist..... | 241 | A xiv | | | |

| | Page. | Vol. |
|--|------------|--------|
| Imperial Refinery Works. | | |
| Notes on, by Blue..... | 26 | v |
| Silver Mg. Co. | | |
| Capital and date of charter..... | 25 | A xv |
| Independence Cobalt Silver Mines Co. | | |
| Capital and date of charter..... | 28 | A xvi |
| (WESTERFIELD) gold mine, MANTOU LAKE, R.R.D. | | |
| Notes on, 1898..... | 75, 76 | viii |
| 1899..... | 62 | ix |
| 1901..... | 250 | xi |
| 1903 (as Reliance mine). | 66, 67 | A xiii |
| gold mine, near STURGEON FALLS, SEINE RIVER. | | |
| Felsite schists in..... | 263 | viii |
| Notes on, 1898..... | 46, 81-83, | viii |
| 1889 (as Rice and Thor- bus claim)..... | 76 | ix |
| Mg. and Dev. Co. | 46, 81 | viii |
| India (i.e., BRITISH EAST INDIA.) | | |
| British methods in..... | 9 | iv |
| Corundum of, notes by Holland. | 230-234 | viii |
| Miller..... | 248 | viii |
| Iron smelting in, notes on..... | 355 | R C |
| Mica of, competing with Canadian. | 28 | xi |
| qualities..... | 135 | x |
| Population and railways of..... | 122 | ii |
| Indian(s). | | |
| <i>See also</i> Ojibway Indians. | | |
| Abitibi dist., diseases among..... | 186 | viii |
| Abitibi lake, photo,.... | 176, 177 | A xiii |
| Cannibalism among..... | 138 | v |
| Fort Mattagami..... | 182 | x |
| photo..... | 128, 129 | ix |
| Graves of:— | | |
| Hay island, L. of the Woods, photo..... | 80, 81 | vi |
| Hell-diver bay, L. of the Woods, photo..... | 51 | v |
| Michipicoten, photo..... | 204, 205 | vii |
| Misemikowish lake..... | 222 | xi |
| Nipigon lake, photo..... | 146 | A xvi |
| James Bay dist..... | 134 | iv |
| Lichens eaten by in extremity.... | 86 | vi |
| Lost lake, R.R.d..... | 60 | v |
| vegetables grown by..... | 182 | vii |
| Mattagami river..... | 123 | A xv |
| Michipicoten div. | | |
| copper mining by..... | 80 | iii |
| notes by J. M. Bell..... | 297, 298 | A xiv |
| Missinaibi, photo..... | 201 | A xv |
| Mississagi dist., photo..... | 160, 161 | xii |
| Moose Factory..... | 192 | viii |
| Moose island, photo of camp..... | 200, 201 | viii |
| Moose River basin..... | 178, 179 | A xiii |
| Night-hawk lake..... | 181 | vi |
| 107 | A xiii | |
| Nipigon lake, photo of camp.... | 143 | A xvi |
| Pipes of, artistically carved..... | 97 | iv |
| Poplar Rapids river..... | 124 | A xv |
| Rainy Lake dist., notes by Cole- man..... | 97, 98 | iv |
| Reported to have attacked Pointe- aux-Mines..... | 129 | viii |
| White-bear lake..... | 161 | x |
| Windermere lake..... | 201 | viii |

Indian Chief Gold Mg. and Devel- opment Co.

| | Page. | Vol. |
|---|------------------------------|-------------|
| Capital and date of charter..... | 10 | vii |
| corn. | | |
| Lake of the Woods..... | 92, 105 | vi |
| Mississagi river..... | 164, 167 | xii |
| New Post, Abitibi river..... | 186 | viii |
| Preparation of, for hominy..... | 199 | v |
| Timagimi lake..... | 58 | R C |
| Head, U. S. | | |
| Armour plate tests at, with nickel steel..... | 136, 137, 141, 148, 186, 196 | ii, iii, iv |
| hill, RAGLAN TP., RENFREW CO. | | |
| Corundum and garnet on..... | 222 | viii |
| Joe | 49 | vii |
| Joe gold mine, CLYTIE BAY, L. OF THE WOODS. | | |
| Notes on, 1902..... | 94, 95 | xii |
| 1903..... | 62 | A xiii |
| Joe Gold Mg. Co. | | |
| Capital and date of charter..... | 5 | xii |
| lake, NORTH OF IGNACE, R.R.D. | | |
| Agricultural land in dist. of..... | 182 | vii |
| Geology of..... | 162 | vii |
| Timber near..... | 180 | vii |
| Lake Copper mine. <i>See</i> Kim- berley copper mine. | | |
| legends. | | |
| Caribon island..... | 110, 111 | v |
| Michipicoten island..... | 112 | v |
| <i>Re</i> showing a mineral discovery to a white man..... | 35 | R C |
| Windigoostigwan lake..... | 138 | v |
| relics. | | |
| Holmesdock, Rainy river..... | 165 | v |
| Iroquois lake..... | 230 | A xiii |
| Lac des Mille Lacs..... | 74, 114 | v |
| Wallbridge iron mine..... | 133 | R C |
| reserves. | | |
| Lac des Mille Lacs..... | 114 | v |
| Michipicoten river..... | 101 | vii |
| Minnesota, U.S..... | 166 | v |
| Rainy Lake dist., area..... | 167 | v |
| Rainy lake..... | 164 | v |
| Seine river..... | 153 | v |
| river, ENGLISH RIVER. | | |
| Rocks on..... | 147 | xi |
| "Indian Soap." | | |
| Harwich tp..... | 125 | i |
| "Indiana" ss. | | |
| Armour plate of..... | 149 | iii |
| Indiana, ONEIDA TP., HALDIMAND CO. | | |
| Gypsum at..... | 52 | B xiii |
| Indiana, U.S. | | |
| Brick pavements in cities of..... | 108 | iii |
| Moraine in..... | 123 | ix |
| Natural gas in..... | 151, 152, 115, 143, 145 | R C, i |
| depth and pressure..... | 155 | i |
| similar to that of Kent co..... | 99 | A xvi |
| Oil in, flash test for..... | 164 | R C |
| Indicolite. | | |
| Madoc and Elzevir tps..... | 200 | ix |
| Industrial Mining, Development and Investment Co. | | |
| Capital and date of charter..... | 10 | vii |

| | Page. | Vol. |
|--|----------|--------|
| Inez (OR CHICAGO OR TRAVERS) nickel mine, DRURY TP., ALG. | | |
| Greenstone in..... | 81 | c xiv |
| Minor ref. to..... | 143 | vii |
| Idle, 1894..... | 249 | iv |
| 1895..... | 273 | v |
| Norite in..... | 112 | c xiv |
| Notes on, by Coleman..... | 194 | A xiii |
| | 23, 144 | c xiv |
| 1891..... | 232 | i |
| 1892..... | 248 | ii |
| 1893..... | 189, 190 | iii |
| 1896..... | 276, 277 | vi |
| 1897..... | 93 | vii |
| "Inflexible," H.M.S..... | 143 | ii |
| Infusorial earth. See Tripolite. | | |
| Ingall, Elfric Drew | | |
| Extract from report by, on silver of L. Superior dist..... | 31 | R C |
| | 51-58 | B xiv |
| Minor ref. to..... | 270 | A xiv |
| Ref. to report by, on iron ores of Kingston-Pembroke Ry. dist.. | 95 | A xiii |
| Reference to report by, on silver in L. Superior dist..... | 32 | R C |
| | 237 | iv |
| | 146, 150 | ix |
| | 96 | xii |
| | 101 | A xiii |
| Views of, <i>re</i> Animikie series..... | 134, 135 | vi |
| Ingersoll, OXFORD N. TP., OXFORD CO. | | |
| Brick-yard at..... | 85 | B xv |
| Oil refineries at..... | 157 | R C |
| Ingolf, R. R. D. | | |
| Distance from, to Mattawa..... | 193 | v |
| Ingram tp., NIP. | | |
| Cobalt bloom and smaltite in.... | 29 | B xiv |
| -nickel ore in..... | 5, 29 | B xiv |
| Ingersoll Rock Drill Co. | | |
| Acknowledgments to..... | 197 | vi |
| Proposal by, <i>re</i> supplying Govt. drill..... | 168 | iv |
| Inks. | | |
| Graphite for..... | 14 | ix |
| Sympathetic, composition of.... | 13 | B xiv |
| Inner Barn, WABINOSH BAY, L. NIP-IGON. | | |
| Limestone on..... | 111 | B xiii |
| Inostranzeff, Alexander A. | | |
| Analysis by, of schungite..... | 166 | vi |
| Inquests. | | |
| On deaths from mining, notes on. | 176, 177 | iii |
| Insect(s). | | |
| Abitibi dist..... | 127-129 | A xiii |
| Rainy Lake dist..... | 97 | iv |
| Insecticides. | | |
| Arsenic compounds for..... | 113-116 | xi |
| | 69 | xii |
| | 32 | B xiv |
| Formulae for making..... | 117 | xi |
| Inspector of Mines. | | |
| Qualifications of..... | 410 | R C |
| Reports by, annually, on the mines of the province:— | | |
| 1891 (Slaght)..... | 222-247 | i |
| 1892 "..... | 231-254 | ii |
| 1893 "..... | 181-199 | iii |
| 1894 "..... | 225-253 | iv |

| | Page. | Vol. |
|--|---------|--------|
| Inspector of Mines.—<i>Con.</i> | | |
| Reports by, annually, on the mines of the province.— <i>Con.</i> | | |
| 1895 (Slaght)..... | 261-284 | v |
| 1896 "..... | 247-281 | vi |
| 1897 "..... | 85-100 | vii |
| (Bow)..... | 34-84 | vii |
| 1898 "..... | 49-99 | viii |
| (De Kalb)..... | 29-48 | viii |
| 1899 "..... | 89-111 | ix |
| 1899 (Bow)..... | 35-88 | ix |
| 1900 "..... | 69-90 | x |
| (Carter)..... | 90-112 | x |
| (De Kalb)..... | 113-135 | x |
| 1901 (Carter)..... | 231-298 | xi |
| 1902 "..... | 108-140 | xii |
| (Miller)..... | 73-107 | xii |
| 1903 "..... | 88-95 | A xiii |
| (Carter)..... | 58-87 | A xiii |
| 1904 "..... | 43-75 | A xiv |
| (Corkill)..... | 76-88 | A xiv |
| 1905 "..... | 47-107 | A xv |
| 1906 "..... | 55-91 | A xvi |
| Instant, Reginald | | |
| Engineer, Craig Corundum mine. | 63 | xi |
| Experiments by, on corundum rock..... | 239 | viii |
| Insurance rates. | | |
| Affected by waterworks..... | 55 | i |
| Intercolonial Deep Well Boring and Mfg. Co. | | |
| Capital and date of charter..... | 10 | vii |
| Interior Construction and Improvement Co. | | |
| Amount paid by, to Treasury, 1900..... | 18 | x |
| Gas export of..... | 39 | xii |
| prohibited..... | 45 | xi |
| plateau, B. C. | | |
| Eruptive contacts in..... | 160 | vii |
| International Asbestos Co. | | |
| Capital and date of charter..... | 38 | A xiii |
| Work by, Elzevir tp..... | 93 | A xiii |
| stopped by blowing out of dam..... | 87 | A xiv |
| Cobalt and Silver Mfg. Co. | | |
| Capital and date of charter..... | 29 | A xvi |
| Committee on Geological Nomenclature. | | |
| Notes, by Gibson, on conclusions arrived at..... | 299 | A xiv |
| Photos of..... | 277 | A xiv |
| Report by, on Pre-Cambrian nomenclature..... | 269-277 | A xiv |
| Work by, Hastings dist..... | 221 | A xvi |
| Copper Co. | | |
| Historical notes, by Ritchie..... | 171 | c xiv |
| Price of nickel controlled by.... | 59 | A xiii |
| Gold and Copper Co. | | |
| Capital and date of charter..... | 38 | A xiii |
| Work by, Barrie and Kaladar tps..... | 112 | xii |
| Gold Mfg. and Dev. Co. | | |
| Option held by, on Ophir g. m..... | 42 | iii |
| Working Gray Eagle g. m..... | 59 | vii |
| Iron Mfg. Co. | | |
| Capital and date of charter..... | 37 | A xiii |
| Mica Co. See National Mica Grinding Co. | | |

| | Page. | Vol. | | Page. | Vol. |
|--|-----------|------|-------------------------------------|----------|------|
| International Mica and Mining Co. | | | Iridosmine. See Osmiridium. | | |
| Capital and date of charter..... | 11 | xi | <i>Iris versicolor.</i> | | |
| Mining Co. | | | Abitibi Lake dist..... | 241 A | xiv |
| Capital and date of charter..... | 9 | xii | Mattagami valley..... | 150 A | xv |
| Licence to..... | 66 | xii | Irish, A. W. | | |
| Nickel Co. | | | Gold mining by, L. of the Woods. | 117 | vii |
| Acknowledgments to..... | 235, 258 | xii | Bud | 27 | ix |
| Canadian Copper Co. absorbed | | | Creek, WOLFORD TP., GREN- | | |
| by..... | 117 | xii | VILLE CO. | | |
| Cobalt speiss shipped to..... | 12 A | xvi | Calcareous formation at..... | 47 B | xiii |
| Composition of..... | 140 C | xiv | Peat Fuel Co. | 193, 194 | i |
| Formation of..... | 21 | xi | Iron and Iron mining. | | |
| Frood mine owned by..... | 264, 265 | xii | Compounds of, notes on classes | | |
| Huronian Co. formed by..... | 71 A | xiv | of..... | 54 B | xv |
| Officers of..... | 22 | xi | Desulphurizing of, notes on... | 92-96 | ii |
| Smelter of, for Cobalt ores..... | 73 B | xiv | Duty on, effect of..... | 232-234 | R C |
| Oil and Gas Co. | | | Exploring for, hints to prospect- | | |
| Capital and date of charter..... | 25 A | xv | ors..... | 453, 454 | R C |
| Peat Co. | | | notes by Coe..... | 464-467 | R C |
| Capital and date of charter..... | 24 A | xiv | For furnaces, advantages of | | |
| Portland Cement Co. | | | wrought..... | 377 | R C |
| Analysis and notes of clay and | | | From magnetic ores, notes on | | |
| marl used by..... | 183 A | xiv | making..... | 473, 474 | R C |
| salt-well, GODERICH. | 31, 116 B | xv | From titaniferous ores, quality | | |
| Capital and date of charter..... | 5 | xii | of..... | 231 | vii |
| Notes on, by Gillespie..... | 140-142 A | xiv | Industry of:— | | |
| salt-well, KINCARDINE. | | | causes which affect..... | 237 | i |
| Log of..... | 184 | R C | future of, notes by Hardy..... | 367-369 | R C |
| Silver Mg. Co. | | | paper by J. Bawden..... | 468-486 | R C |
| Capital and date of charter..... | 10 | vii | Magnetic concentration of, paper | | |
| Inter-Ocean Mg. and Prospecting | | | by Wells..... | 322-342 | xii |
| Co. | | | Manufacture of pig, paper on | | |
| Capital and date of charter..... | 40 | vii | locations for..... | 122-128 | ii |
| Interprovincial Mg. Co. | | | Mining of, neglected, 1855-1895... | 7 | v |
| Capital and date of charter..... | 30 A | xvi | revival in, 1898..... | 233, 234 | vii |
| Interstate Consolidated Mineral | | | Origin of, notes by Bell..... | 13 | R C |
| Cor. | | | Proportion of, in earth's crust... | 447 | R C |
| Capital and date of charter..... | 10 | x | Royalties on, in other countries... | 19 | i |
| Operating Big Master g. m..... | 91 | xii | Smelting of, paper by Hardy..... | 319-366 | R C |
| 4 A | xiii | | peat for..... | 207-209 | i |
| Work by, 1900..... | 98 | x | See also Smelting. | | |
| Inverarite. | | | Specific gravity of..... | 448 | R C |
| Composition of..... | 170 | ii | Supply of, exhaustion of..... | 7 A | xiii |
| Investors Mg. and Development | | | Treatment of, paper by Blue..... | 83-96 | ii |
| Co. | | | World's production, 1800, 1888..... | xviii | R C |
| Capital and date of charter..... | 10 | vii | 1886-1888..... | 224 | R C |
| Inwood, BROOKE TP., LAMBERTON CO. | | | various dates..... | 223 | R C |
| Boring in, for oil and gas, log. 111, | 114 A | xv | Canada. | | |
| proposed..... | 107 | ix | Bounties on, 1883-89..... | 328 | R C |
| Tenton formation at, height | | | Consumption, 1868-1886..... | 397 | R C |
| above tide level..... | 113 A | xv | annual..... | 216 | R C |
| "Iowa" s. s..... | 186-188 | iv | Exports, 1881-1887..... | 244-254 | R C |
| Iowa, U. S. | | | 1885-1888..... | 225 | R C |
| Brick pavements in cities of..... | 108, 109 | iii | Production, 1870, 1880..... | 209 | R C |
| Shales of, analysis..... | 120 | iii | 1887. xviii, 209, 213, 243 | | R C |
| Ireland. | | | 1901..... | 322 | xii |
| See also Great Britain. | | | Report on, by Harrington (syn- | | |
| Iron ores from, for Baltimore... | 400 | R C | opsis)..... | 52-56 | ii |
| Mineral lands in, royalty on..... | 36, 37 | i | Keewatin, Lac Seul (mag.)..... | 61 | v |
| Peat in, amount of water in..... | 192 | i | Nova Scotia, Pictou..... | 398 | R C |
| as a fuel, tests on..... | 202, 203 | i | Quebec, Opasatika lake..... | 230 | xi |
| 201 | ii | | Moisie river, concentrat- | | |
| drying process..... | 195 | i | ed by magnetic separ- | | |
| industry, notes on..... | 189 | i | ator..... | 491 | R C |
| Peat-charcoal in, price of..... | 207 | i | notes..... | 24-28 | ii |
| Irena, MATILDA TP., DUNDAS CO. | | | by Hunt..... | 346 | R C |
| Morainic drift near..... | 220 | x | Quinze river, notes by | | |
| | | | Miller..... | 226, 227 | xi |

| | Page. | Vol. | | Page. | Vol. |
|--|------------------|-------|--|-------------------|------|
| Iron AND Iron mining.—<i>Con.</i> | | | Iron AND Iron mining.—<i>Con.</i> | | |
| Ontario. | | | Ontario.—<i>Con.</i> | | |
| Bounties on..... | 31 | iv | Statistics of, 1897.... | Pref. Pts. II and | |
| 1883-89..... | 328 | R C | III, 15, 24 | vii | |
| 1883-1893..... | 28 | ii | 1898..... | 11, 18 | viii |
| 1900..... | 31-33 | x | 1899..... | ix | viii |
| conditions..... | 74 | ii | | 13, 14 | ix |
| Connec's views..... | 112 | ii | 1900..... | 7, 11, 12 | x |
| <i>See also</i> Iron Mining | | | 1901..... | 8, 12, 13, 23 | xi |
| Fund. | | | 1902..... | 12, 13, 19 | xii |
| Chromium in non-titaniferous.... | 233 | vii | 1903..... | 2, 7 A | xiii |
| Eastern, evidence before R. C. | | | 1904..... | 1, 3, 13-15 A | xiv |
| 130-141 | | R C | 1905..... | 1-3, 14 A | xv |
| notes by Merritt..... | 127-130 | R C | 1906..... | 3-6, 16-18 A | xvi |
| Exhibits of, at World's Fair, list. | | | | | |
| 78-82 | ii | | Algoma dist. | | |
| Hudson Bay slope..... | 127 | iv | depression in industry (1891)..... | 8 | |
| Huronian areas..... | 20-23 | R C | Desert lake..... | 143 | R C |
| notes by Bell..... | 87, 88 | i | Echo lake..... | 143 | R C |
| report by Coleman..... | 181-212 | x | Garden River reserve..... | 143 | R C |
| Industry, 1900..... | 26-31 | x | Kamiskotia lake, near (hem.) | | |
| facts and opinions, | | | 120, 130, 133 A | xv | |
| paper by Blue..... | 96-122 | ii | Lacloche mts..... | 143 | R C |
| 1887, notes by the | | | Loon lake..... | 144 | R C |
| Commissioners..... | 215-217 | R C | McDonald tp..... | 143 | R C |
| possible expansion..... | 225 | R C | Manitoulin island, boring for. | | |
| Keewatin formation, occurrences | | | 43, 45 A | xiii | |
| in..... | 30 | B xiv | Mattagami river (lim.).... | 152-154 A | xiii |
| Manufacturing of, paper on..... | 13-30 | ii | Michipicoten div. | | |
| prospects of..... | 28-32 | iv | Little Gros Cap..... | 11 Bull. iii | |
| Mining and smelting of, evidence | | | Pike lake..... | 203 | viii |
| before R. C..... | 390-402 | R C | prospecting for..... | 254 | v |
| early..... | 255 | R C | report by Coleman and Will- | | |
| Inspector's report on for: | | | mott..... | 152-185 | xi |
| 1891..... | 236-238 | i | J. M. Bell..... | 278-355 A | xiv |
| 1893..... | 191, 192 | iii | report by Coleman and | | |
| 1894..... | 249 | iv | Moore..... | 173-206 A | xv |
| 1895..... | 274-276 | v | Wawa lake (near), with jas- | | |
| 1897..... | 97 | vii | per..... | 11 Bull. iii | |
| 1898..... | 30-32 | viii | <i>See also</i> Michipicoten Mg. div. | | |
| 1899..... | 87, 88, 102, 105 | ix | Helen iron mine. | | |
| 1900..... | 126-129 | x | Mississagi..... | 143 | R C |
| 1901..... | 258-266 | xi | Oba river (lim.)..... | 156 A | xiii |
| 1902..... | 102-104, 113-115 | xii | Opasatika river..... | 136, 150-152 A | xiii |
| 1903..... | 73-77, 94, 95 A | xiii | Ruby lake..... | 144 | R C |
| 1904..... | 59, 60 A | xiv | Shining-tree lake..... | 184 | vi |
| 1905..... | 70-72 A | xv | Sudbury district..... | 59 | R C |
| 1906..... | 72-74, 80-82 A | xvi | Wallace mine, near..... | 142, 143 | R C |
| paper by Blue..... | 58-82 | ii | notes by Mer- | | |
| Northern, report by Miller..... | 304-317 | xii | ritt..... | 123 | R C |
| Northwestern, report by Cole- | | | Frontenac co. | | |
| man..... | 128-151 | xi | Bedford tp., boring for..... | 15, 174-176 | iv |
| Notes on, 1898, by Provincial | | | Glendower mine, | | |
| Assayer..... | 288 | viii | notes..... | 227, 228 | v |
| Occurrences..... | 68 | R C | Olden tp..... | 54 A | xiii |
| | 191 | ii | Palmerston tp. (mag.)..... | 218 | v |
| | 8, 9 A | xiii | Grey co..... | 43 | R C |
| notes by Blue..... | 175, 176 | i | Haliburton co., blast furnace | | |
| paper by Blue..... | 58-82 | ii | proposed..... | 326, 395 | R C |
| Ranges of, extent..... | 200, 201 | x | evidence before R. C..... | 52, 388 | R C |
| report by Coleman..... | 150-174 | ix | Lutterworth tp., mining..... | 57 B | xiii |
| Statistics of, 1870, 1889, 1887.... | 210 | R C | Hastings co., Mayo tp., analyses. | 97 A | xv |
| 1881..... | 116 | ii | tests..... | 333, 334 | xii |
| 1885-88 (exports).... | 225 | R C | Kingston dist. | | |
| 1888..... | 72 | R C | character of ore..... | 392 | R C |
| 1891..... | 6 | i | cost of production..... | 391 | R C |
| 1896..... | 13 | vi | evidence before Roy. Com. | | |
| | ix | viii | 52, 131-141 | R C | |
| | | | waterpower for working..... | 390 | R C |

| | Page. | Vol. |
|-----------------------------------|---------------|--------|
| Iron AND Iron mining.—Con. | | |
| Ontario.—Con. | | |
| Lanark co. | | |
| Bathurst tp., notes by Rattle. | 52, 138 | R C |
| Carleton Place. | 68 | R C |
| Darling tp., notes by Rattle. | 52, 138 | R C |
| Nipissing dist. | | |
| Boston tp., report by Miller. | 261-267 | A xiv |
| Burwash lake. | 15 | A xv |
| | 16, 74 | A xvi |
| Falconbridge tp., boring for. | 51, 53 | xii |
| Haileybury, near. | 12 | A xiv |
| Hutton tp., (Moose Mt. range) | 39 | A xvi |
| analyses. | 73 | A xvi |
| map. | 217 | A xiii |
| notes by Coleman. | 216-221 | A xiii |
| paper by Leith. | 318-321 | xii |
| prospects promising. | 16 | A xvi |
| report by Miller. | 160-180 | x |
| James bay, south of. | 69, 70 | R C |
| Montreal river. | 15 | A xv |
| (specular). | 127 | iv |
| Shining-tree lake. | 15 | A xv |
| Timagami (near). | 49 | A xvi |
| Timagami lake. | 56 | R C |
| | 15 | A xv |
| Tomiko river. | 58 | E C |
| Wisner tp. | 220 | A xiii |
| Parry Sound dist. | 16 | A xvi |
| Foley tp., boring for. | 44, 45 | A xiii |
| prospecting for, 1902. | 50, 51 | xii |
| Peterborough co. | | |
| Belmont tp. | 51 | iii |
| analysis. | 130 | R C |
| Rainy River dist. | | |
| Atikokan river. | 61, 144 | R C |
| | 73-75 | iv |
| | 142 | v |
| Black Sturgeon lake (near). | 29 | iii |
| Harold lake, prospecting for. | | |
| results in finding gold. | 140 | v |
| Hunter island. | 125, 126, 144 | R C |
| | 123 | iv |
| Lake of the Woods, discovery. | 64 | R C |
| Rainy lake. | 144 | R C |
| Seine river. | 73-75 | iv |
| Steep-rock lake, locations. | 71 | v |
| Wabigoon (near), in streams. | 171 | vii |
| Wiskey Jack lake. | 141 | v |
| Renfrew co., Calabogie, near. | 234 | vii |
| Simcoe co., discharging at Mid- | | |
| land, photo. | 16, 17 | x |
| Thunder Bay dist. | | |
| Aniimikie range. | 156-162 | A xv |
| Eagle river, English river. | 64, 145 | R C |
| Greenwater lake. | 81, 126, 127 | v |
| Gunflint lake. | 144 | R C |
| | 123 | iv |
| notes by Sedgwick. | 126, 127 | R C |
| Kaministiquia river. | 61 | R C |
| L. Superior dist. | | |
| Black bay. | 189 | v |
| character. | 144 | R C |
| evidence before R. C. | 61-63 | R C |
| Little Pic river. | 37 | R C |
| Loon Lake area, report by | | |
| Silver. | 254-260 | A xiv |

| | Page. | Vol. |
|--|--------------------|--------|
| Iron AND Iron mining.—Con. | | |
| Ontario.—Con. | | |
| Thunder Bay dist.—Con. | | |
| Matawin range. | 209 | v |
| notes by Blue. | 131, 132 | v |
| report by Coleman. | 80-84 | v |
| Nipigon lake, east of:— | | |
| report by Coleman. | 105-135 | A xvi |
| Moore. | 136-148 | A xvi |
| map to accompany. | 108, 109 | A xvi |
| North lake, notes by Sedgwick. | 126, 127 | R C |
| Pigeon River dist., evidence | | |
| before R. C. | 144 | R C |
| Wellington co., Palmerston. | 139 | R C |
| Other countries. | | |
| Algeria, supplying Le Creuzot | | |
| works. | 501 | R C |
| France, royalties on. | 19 | i |
| Germany, cost of making. | 396 | R C |
| Great Britain. | | |
| Cumberland co. | 133 | R C |
| production, 1800, 1850. | 399 | R C |
| 1888. | xviii | R C |
| reason for successful industry. | xxi | R C |
| royalties on. | 18, 27, 28 | i |
| Greenland (native). | 151 | C xiv |
| Norway, character of ore. | 138, 392 | R C |
| Spain, Bilbao. | 19, 20, 26, 28, 30 | i |
| Sweden, cost of making. | 396 | R C |
| United States. | | |
| Clinton co., N. Y. | 43 | R C |
| cost of production. | 10 | i |
| industry, 1903. | 145, 146 | iii |
| Michigan. | 20 | R C |
| cost of boring for. | 231, 232 | v |
| notes by Coleman. | 150-152 | ix |
| Minnesota. | 231 | v |
| notes and diagrams. | 123-125 | R C |
| output, 1884-88. | 208 | R C |
| New Jersey, treatment of mag- | | |
| netic ores. | 102, 103 | ii |
| Pennsylvania, paper on indus- | | |
| try. | 117-120 | ii |
| Statistics, 1887. | 213 | R C |
| 1888. | 525 | R C |
| Royalties on. | 12, 40, 42 | i |
| Tower, width of beds. | 144 | R C |
| "Iron." | | |
| Extract from, <i>re</i> iron in Canada. | 468 | R C |
| "Iron Age." | | |
| Statistics from, <i>re</i> labour in U. S. | | |
| iron trade, 1887. | 469 | R C |
| Iron and Steel Co. of Canada. | | |
| Capital and date of charter. | 37 | A xiii |
| chromate. <i>See</i> Chromite. | | |
| City Tool Works. | 119 | ii |
| creek, DOG RIVER, L. SUPERIOR. | | |
| Drainage area of. | 285 | A xiv |
| Iron formation north of. | 314 | A xiv |
| mine on, photo. | 322 | A xiv |
| mining north of. | 321 | A xiv |
| Minor ref. to. | 291 | A xiv |
| Portages near, description. | 290, 291 | A xiv |
| dam, VERMILION RIVER, NIP. | | |
| Iron ore from, analysis. | 218 | A xiii |
| Dam rapid, VERMILION RIVER, | | |
| NIP. | 298 | xii |

| | Page. | Vol. |
|---|------------|------|
| Iron Duke iron mine, DARLING TP., LANARK CO. | | |
| Ore from, shewn at Chicago..... | 80 | ii |
| formation. | | |
| Larder lake..... | 211 A | xvi |
| Michipicoten div. <i>See</i> Michipicoten div. | | |
| Nipigon Lake dist. | | |
| 17, 111, 123-126, 144, 145, | 207 A | xvi |
| disturbed state of | 114 A | xvi |
| gabbro dike in..... | 119, 126 A | xvi |
| gold in rocks of | 207 A | xvi |
| photo | 120 A | xvi |
| Windigokan lake..... | 143 A | xvi |
| island, L. NIPISING. | | |
| Iron ore on..... | 87 | i |
| exhibited at World's Fair. | 80 | ii |
| hematite | 55 | ii |
| specular | 63 | ii |
| Limestone on, crystalline..... | 68 | i |
| notes by Barlow..... | 83 B | xiii |
| lake, McTAVISH TP., TH. B. D. | | |
| Rocks on, photo | 169 A | xv |
| lake, MICHIPICOTEN DIV. | | |
| Fault west of | 311 A | xiv |
| Iron ores on and near | 257 | viii |
| 160 161 | ix | |
| analysis..... | 320 A | xiv |
| boring for..... | 104 | xii |
| mining | 139 | x |
| siderite and magnetite. | 313 A | xiv |
| prospects promising... | 321 A | xiv |
| Photos of..... | 290, 291 A | xiv |
| Rocks on and near | 256 | viii |
| 303, 304, 308, 313, 316, 354 A | xiv | |
| chert, analysis | 309, 310 A | xiv |
| greenstone..... | 302 A | xiv |
| Iron formation, notes by J. M. | | |
| Bell and photos..... | 317-319 A | xiv |
| notes by Bain. | | |
| 320, 321 A | xiv | |
| width | 339 A | xiv |
| jaspilite..... | 309 A | xiv |
| phyllites | 343 A | xiv |
| Route to, from Frances lake. | 290, 291 A | xiv |
| Trees on | 296 A | xiv |
| lake, N. OF ECHO LAKE, ALG. | | |
| Notes on, by Coleman..... | 124 | viii |
| Rocks on..... | 159 | viii |
| lake, TIMAGAMI DIST., NIP. | | |
| Iron ore on..... | 170 | x |
| with jasper, photo. | 176, 177 | x |
| Mining Fund. | | |
| Creation of and objects..... | 32 | iv |
| Modification of terms of..... | 7 | viii |
| Payments out of, 1896-1900 | 32 | x |
| 1901 | 26 | xi |
| 1902 | 25 | xii |
| 1903 | 11 A | xiii |
| 1904 | 14, 15 A | xiv |
| mt., ATIKOKAN RIVER, R. R. D. | | |
| Description of..... | 141 | v |
| Iron on, notes by Coleman..... | 75 | iv |
| Notes on, by McKellar | 71 | ii |
| Photo of..... | 80, 81 | v |
| ochre OR Iron paint. <i>See</i> Ochre. | | |
| oxalate. <i>See</i> Humboldtine. | | |
| phosphate. <i>See</i> Vivianite. | | |

| | Page. | Vol. |
|--|----------------|------|
| Iron pyrites. (PYRITES OR FOOL'S GOLD.) | | |
| Association of, with gold..... | 37 | iv |
| Canada, production | 525 | R C |
| 1870, 1880 | 209 | R C |
| 1886, 1887 | 243 | R C |
| Crystals of, exhibited at World's Fair..... | 187 | ii |
| Determination of | 203, 206, 220 | vi |
| Effect of, on apatite deposits..... | 442 | R C |
| European deposits | 192 A | xvi |
| Hardness of..... | 202 | vi |
| In building-stones..... | 133, 131 | iii |
| Lac Seul, Kee..... | 61 | v |
| Mines of, notes on | 20 A | xv |
| hi-toric | 149, 150 A | xvi |
| Mistaken for gold | 9 Bull. | iii |
| Notes on..... | 536 | R C |
| 72, 73 A | xvi | |
| by Bauerman..... | 472 | R C |
| Occurrences of | 207 | ix |
| Ontario, report by Fraleck..... | 149-201 A | xvi |
| Prices of..... | 184, 185 A | xvi |
| Prospecting for, hints <i>re</i> | 455 | R C |
| notes by Fraleck. | | |
| 185, 186 A | xvi | |
| Quebec, L'Assomption river. | 443 | R C |
| Wright silver mine | 101 A | xiv |
| 24 B | xiii | |
| Specific gravity of..... | 202 | vi |
| Statistics, 1870, 1880..... | 210 | R C |
| 1901 | 13 | xi |
| 1902 | 12, 13, 38 | xii |
| 1903 | 3, 4, 22 A | xiii |
| 1904 | 1, 3, 19, 72 A | xiv |
| 1905 | 1, 4, 21 A | xv |
| 1906 | 4, 6, 21, 22 A | xvi |
| 1901-1906 | 201 A | xvi |
| United States, production..... | 525 | R C |
| Virginia, notes by Fraleck..... | 192 A | xvi |
| Uses of..... | 256, 257 | v |
| | | |
| Abitibi lake..... | 219, 220 A | xvi |
| Big river, Opasatika river..... | 243 | v |
| 149, 181 A | xvi | |
| notes by Driver..... | 255, 256 | v |
| Connec tp., mining, 1900..... | 107, 108 | x |
| Edgewood island L. Huron..... | 109 | R C |
| Elizabethtown, with cobalt and nickel..... | 60 B | xiv |
| Gold creek, Matawin river..... | 82 | v |
| Gondreau lake..... | 184-187 A | xv |
| Hastings co. | | |
| Madoc tp., Pannockburn | 38 | xii |
| Madoc, near..... | 20 A | xv |
| 22 A | xiii | |
| notes by Miller | 199 | xi |
| on mine..... | 39 A | xiv |
| <i>See also</i> Jarman py. m. | | |
| Hungerford tp | 20, 94 A | xv |
| Hungerford..... | 133 | R C |
| mill at, for sulphuric acid. | 79 A | xvi |
| <i>See also</i> British American Pyrites Co. | | |
| Helen iron m., Michipicoten div. | 38 | xii |
| 22 A | xiii | |
| 20, 71 A | xv | |
| 22, 73 A | xvi | |
| paper by Fraleck..... | 164-'69 A | xvi |

| | Page. | Vol. | | Page. | Vol. |
|--|-----------|------|---|--------------------|------|
| Iron pyrites.—<i>Cont.</i> | | | Iroquois falls, ABITIBI RIVER. | | |
| Kaministiquia (near)..... | 129 | xi | Character of river near..... | 185 A | xiv |
| Lacloche mts..... | 59 | R C | tributaries near..... | 199 A | xiv |
| Lake Superior, Caldwell pt..... | 149 | ix | Minor ref. to..... | 180, 181 | viii |
| Jackfish bay..... | 26 | R C | Photos of..... | 181, 185 | viii |
| | 190 | v | | 230, 231 A | xiv |
| Lanark co..... | 138 | R C | Rocks near..... | 193 | viii |
| Larder lake and vicinity..... | 220-222 | xi | | 206, 210 A | xiv |
| | 215 A | xvi | Soil from, analysis..... | 246 A | xiv |
| Mattagami river..... | 128 | iv | character..... | 244 A | xiv |
| Minnitaki lake..... | 87 | v | Timber near..... | 204 A | xiv |
| | 20, 47 A | xv | Waterpower at..... | 193 | viii |
| notes..... | 61 A | xv | | 208, 209 A | xiv |
| Missinaibi river, Split-rock port- age..... | 256 | v | lake (GLACIAL). | | |
| Montreal river..... | 209 A | xiv | Age of..... | 237 A | xiii |
| Fort Matachewan..... | 113 A | xiii | Ancient relics of Indians found on..... | 230 A | xiii |
| S. of Coleman tp..... | 30 B | xiv | Ironville, ESSEX CO., N. J. | | |
| Nickel lake, R. R. d..... | 74 | iv | Iron smelting at..... | 477 | R C |
| | 296 | xi | Irvine, Robert | | |
| Night-hawk river..... | 108 A | xiii | | 515 | R C |
| Onwatin lake..... | 204 A | xiii | Thomas | 48, 50 | x |
| Parry Sound, south of..... | 100 | iv | river, GRAND RIVER. | | |
| Partridge-crop lake..... | 174 | xii | Guelph formation on..... | 121 B | xiii |
| Plevna (near)..... | 203 | xi | Irving, Prof. Roland D. | | |
| Port Arthur silver mines..... | 54, 55 B | xiv | Paper by, on copper deposits of the Keweenaw series..... | 82-88 | iii |
| Three A mine..... | 28 | R C | Ref. to report by, on Penokee iron range..... | 196, 197 | x |
| Pukaskwa river..... | 133, 134 | viii | Surveys by, Huronian areas N. of Great Lakes..... | 158, 168, 170, 171 | viii |
| Robert bay, Muskoka dist..... | 81 B | xiii | Views of, <i>re</i> :— | | |
| Round lake, E. of Moss tp. 75, 87, 119 | | v | break in Huronian..... | 185 | ix |
| Schreiber (near), mining..... | 78, 134 | vii | copper-bearing rocks of L. Superior..... | 134 | vi |
| Shilton mine..... | 61 A | xvi | iron ore in Huronian..... | 20 | R C |
| Steep-rock lake..... | 72, 73 A | xiv | origin of Penokee iron ores..... | 199 | x |
| Sudbury district..... | 16, 158 C | xiv | structure of L. Superior basin. 75, 76 | | iii |
| Bowell tp..... | 95 C | xiv | Work by, on copper-bearing rocks of L. Superior..... | 175 | i |
| crystals..... | 281 | xii | | 256 A | xiv |
| Elsie mine..... | 51 C | xiv | T. C. | 116 | ix |
| Graham tp..... | 142, 425 | R C | | 142 | x |
| Levack tp..... | 434 | R C | | 74 | xi |
| Whistle mine..... | 75 C | xiv | Washington | | |
| Timagami Lake dist. | | | Notes by, on mode of living at Fort William, 1800..... | 199 | v |
| James lake..... | 20, 88 A | xv | Irwin—? | | |
| mining..... | 74 A | xvi | Views of, on Canadian and Italian asbestos..... | 97 | iii |
| notes by Fraleek..... | 165 A | xvi | J. J. | | |
| parallel with jaspilite..... | 173 | x | Oil and gas on farm of, E. Tilbury tp..... | 97, 98 A | xvi |
| Timagami lake..... | 56 | R C | notes..... | 102 A | xvi |
| Wataybeeg river..... | 113 A | xiii | James | | |
| Wild-potato lake (near)..... | 68 | v | Brick-yard of, Norwich..... | 86 B | xv |
| pyrites, magnetic See Pyr- rhotite. | | | clay for, analysis..... | 15 B | xv |
| Range railway, MINN. | 241 | R C | Isa Mining Co. | | |
| spathic See Siderite. | | | Capital and date of charter..... | 25 A | xv |
| specular See Hematite and specular iron ore. | | | Isaacson, Isaac | | |
| Irontale, Bancroft & Ottawa Ry. | | | | 25 A | xiv |
| Purposes of..... | 131 | R C | Isabella Furnace Co. | | |
| Ironton, SARK CO., WIS. | | | Labour employed by, statistics.. | 370 | R C |
| Record of iron furnace at..... | 338 | R C | gold mine, BAD VERMILION LAKE, R. R. D. | | |
| Iroquois, MATILDA TP., DUNDAS CO. | | | Idle, 1900..... | 83 | x |
| Limestone at..... | 40 B | xiii | Notes on, 1899..... | 68 | ix |
| beach. | | | lake, MICHIGICOTEN DIV., ALG. | | |
| Hamilton, notes and photo..... | 28, 29 B | xv | | 289 A | xiv |
| Ontario, report by Coleman..... | 225-244 A | xiii | | | |
| Trenton, near, altitude..... | 222 | x | | | |
| photo..... | 224, 225 | x | | | |
| Cobalt Silver Mg. Co. | | | | | |
| Capital and date of charter..... | 28 A | xvi | | | |

| | Page. | Vol. |
|---|------------|------|
| Iserhoff island , KABENUNG LAKE, ALG. | | |
| Rocks south of, and opposite.... | 341 A | xiv |
| Iserlohn , WESTPHALIA, GERMANY. | | |
| Nickel refinery at..... | 175 C | xiv |
| Ishpeming , MICH. | | |
| Iron at, boring for, cost..... | 232 | v |
| peculiar course of hole..... | 224, 225 | v |
| Notes by Coleman..... | 150-152 | ix |
| Isiah (BIBLICAL)..... | 166 | i |
| Island bay , BAD VERMILION LAKE, R. R. D. | | |
| Granite near, analysis..... | 101 | v |
| photo..... | 64, 65 | vi |
| creek , SANDCHERRY RIVER, VERMILION RIVER. | | |
| Rocks on..... | 68, 69 C | xiv |
| Terrace on..... | 103, 106 C | xiv |
| falls , MATTAGAMI RIVER, ALG. | | |
| Description of river near..... | 121 A | xv |
| Granite at, character..... | 134 A | xv |
| Photo..... | 129 A | xv |
| falls , SEINE RIVER, R. R. D. | | |
| Gold mining near..... | 67 | vii |
| | 92-94 | viii |
| | 76-81 | ix |
| | 239 | xi |
| | 71 A | xiii |
| Mines idle, 1900..... | 103 | x |
| Notes on..... | 74 | vi |
| Photos of..... | 32, 33 | vi |
| Falls Mines Co. | | |
| Capital and date of charter..... | 10 | ix |
| Granite Co. | | |
| Capital and date of charter..... | 24 A | xiii |
| lake , E. OF MOUTH OF ECHO RIVER, ALG. | | |
| Iron ore near..... | 188 | x |
| lake , MICHIPICOTEN DIV., ALG. | | |
| Iron formation on..... | 178 A | xv |
| lake , NEAR BLACK STURGEON LAKE, TH. B. D. | | |
| Contact, Huronian-Laurentian on..... | 110 | vii |
| lake , ROSSLAND, R. R. D..... | 29 | iii |
| of Orleans , ST. LAWRENCE RIVER, QUE. | | |
| Anthraxolite in..... | 6 Bull. | ii |
| portage , ABITIBI RIVER. | | |
| Photo of river below..... | 184, 185 | viii |
| portage , WANAPITEI RIVER, NIP. | | |
| Limestone at, dolomite..... | 82 | i |
| notes..... | 83 B | xiii |
| river , VERMILION RIVER, NIP. | | |
| Nickel ore on..... | 199 A | xiii |
| Isle a la Pêche , L. ST. CLAIR, U. S..... | 108 | v |
| aux Cerfs . See Stag island. | | |
| de Maurepas . See Michipicoten island. | | |
| Parisienne . See Parisian isle. | | |
| Royale , L. SUPERIOR, U. S. | | |
| Chlorastrolite on..... | 196 | ix |
| Copper on, native..... | 92 | RC |
| Keweenaw formation on..... | 36 | RC |
| Syncline of..... | 76 | iii |
| Verte , TEMISCOUATA CO., QUE. | | |
| Peat at..... | 198 | ii |

| | Page. | Vol. |
|---|---------------|------|
| Islet lake , L. OF THE WOODS, R. R. D. | | |
| Gold mining on..... | 176 | v |
| Minor ref. to..... | 112 | vii |
| lake , WANAPITEI RIVER, NIP. | | |
| Gold near..... | 258 | vii |
| Itacolumite . | | |
| Definition of..... | 236 | vi |
| Italy . | | |
| Arsenic mining in..... | 101 | xi |
| production, 1895-99..... | 110 | xi |
| Asbestos in..... | 246 | i |
| compared with Canadian..... | 97 | iii |
| notes by Boyd..... | 96 | iii |
| Iron production of, 1886..... | 224 | RC |
| Marble of, compared to that of Hastings co..... | 80, 81 | RC |
| Mining laws of..... | 297, 298 | RC |
| Nickel in auriferous sands of..... | 151 C | xiv |
| coinage in, composition..... | 184 | iv |
| Itch lake , ALG. See Rice lake. | | |
| <i>ite</i> . | | |
| As a mineral termination..... | 448 | RC |
| Iturbide , CHIHUAHUA, MEXICO. | | |
| Cobalt minerals in..... | 71 B | xiv |
| Ivanhoe , HUNTINGDON TP., HASTINGS CO. | | |
| Limestone quarry near. See Crookston. | | |
| Jack, Edward | | |
| Acknowledgments to..... | 4 | iii |
| Paper by, on moss-litter..... | 139-144 | iii |
| lake , SEINE RIVER DIST., R. R. D. | | |
| Gold mining on and near..... | 81 | ix |
| | 105 | x |
| | 242 | xi |
| Lake gold mine , SEINE RIVER DIST., R. R. D. | | |
| Notes on, 1900..... | 106, 107 | x |
| 1901..... | 242 | xi |
| Lake Gold Mining Co. | | |
| Absorbed by St. Anthony G. M. Co..... | 50 A | xv |
| Board of Directors..... | 106 | x |
| Capital and date of charter..... | 9 | x |
| Work by, Sturgeon Lake dist. | | |
| | 148, 149, 256 | xi |
| | 82 | xii |
| | 70 A | xiii |
| Jacks, C. B. | | |
| Claim of, near Ursa Major mine..... | 86 | x |
| President, Jackfish Bay Mg. Co..... | 95 | viii |
| | 85 | x |
| Jackfish . | | |
| Mattawan river, Montreal river, L. Superior..... | 200 | viii |
| bay , L. SUPERIOR. | | |
| Building-stone on..... | 61 | RC |
| Description of, by Coleman..... | 84 | v |
| Glacial striae on..... | 89 | v |
| Gold on..... | 26, 62, 115 | RC |
| | 112, 113 | v |
| mining, notes by McKellar..... | 189, 190 | v |
| Granite and syenite on, petrographical notes..... | 103, 104 | v |

| | Page. | Vol. | | Page. | Vol. |
|---|-------------|------|--|----------|------|
| Jackfish bay, L. SUPERIOR.—<i>Con.</i> | | | Jackson iron mine, Tower, U. S. | | |
| Iron ore on | 23, 145 | R C | Jasper in | 189 | x |
| Road from, to Long lake | 9 | vi | Notes on, by Coleman | 151 | ix |
| | 34 | vii | Soap and paint rocks at | 153 | ix |
| Silver mining on | 445 | R C | oil well, LEANINGTON | 116 A | xiv |
| Rainy lake | 44 | iv | Jacobs, J. A. | 81, 83 A | xv |
| Welcome lake, Nip., photo. | 176, 177 | vi | Robert | 83 A | xv |
| Windermere lake | 201 | viii | Jacobs claim, COLEMAN TP., NIP. | | |
| Jackfish, JACKFISH BAY, L. SUPERIOR. | | | <i>See also</i> Kerr Lake Mg. Co. | | |
| Country near, description | 84 | v | Diabase in | 29 B | xiv |
| Gold mining near, Inspector's | | | Jacobsen, Charles | 56 A | xiii |
| report on:— | | | Jacob | 56 A | xiii |
| 1896 | 265, 266 | vi | Jacques—? | | |
| 1897. <i>See also</i> Empress g. m. 80-82 | | vii | Acknowledgments to | 148 | iii |
| 1898 | 95 | viii | Views of, on nickel-steel armour | 160 | iii |
| 1899 | 82-84 | ix | Jaffray, Robert | 29 | iv |
| 1900 | 85-87 | x | tp., R. R. D. | | |
| Iron mining near, 1903 | 74 A | xiii | Gold mining in | 49 | vi |
| Rocks at | 104 | v | | 57 | vii |
| | 147 | vii | notes by Blue | 185, 186 | v |
| Bay Syndicate Mg. Co. | | | <i>See also</i> Black Sturgeon g. m. | | |
| <i>See also</i> Ursa Major mine. | | | El Diver g. m. | | |
| Capital and date of charter | 10 | vii | Rajah g. m. | | |
| Work by, 1898 | 95 | viii | Scramble g. m. | | |
| gold mine. <i>See</i> Empress gold | | | Jalisco state, Mexico. | | |
| mine. | | | Cobalt ores in | 71 B | xiv |
| lake, MICHIGOTEN DIV., ALG. | | | Jamaica. | | |
| Description of | 294 A | xiv | Nickel coinage in | 161 | ii |
| Iron ore near | 160 | ix | James, Alfred | 244 | ii |
| lake, Moss tp., TH. B. D. | | | | 182, 184 | iii |
| Description of, by Blue | 121 | v | E. H. | 62 | ix |
| Gold on and near: | | | | 99 | x |
| Discovery | 114 | R C | H. | | |
| notes by Bell | 25 | R C | Brick-yard of, Delaware | 79 B | xv |
| <i>See also</i> Huronian g. m. | | | clay for, analysis | 14 B | xv |
| Rocks on | 76 | v | Henry | 228 | i |
| Route from, to Shebandowan lake. | 125 | v | Joseph | | |
| (OR HUB) lake, W. OF STUR- | | | Actinolite mining by | 98 | viii |
| GEON LAKE, TH. B. AND R. R. | | | | 27 | xi |
| DISTS | 147 | xi | | 26 | xii |
| Lake Mining Co. | | | | 12, 92 A | xiii |
| Capital and date of charter | 10 | vii | exhibits at Pan-American Exh. | 85 | xi |
| Organization of | 76, 77, 123 | v | notes by himself | 87 | R C |
| Work by, near Jackfish bay | 135 | vii | stopped by blowing out of dam. | 87 A | xv |
| <i>See also</i> Huronian g. m. | | | Arsenic on land of | 102 | xi |
| Jackland, J. | | | mining | 288 | viii |
| Owner, Gibson mica mine | 291 | xi | | 56 | xii |
| Jack's tin. <i>See</i> Blueite. | | | notes by Miller | 200 | xi |
| Jackson, Charles | 207 | iv | O. S. | | |
| | 33 | vii | Analysis by, of:— | | |
| Dr. Charles | | | Cobalt ores | 99 A | xiii |
| Views of, on origin of copper S. | | | | 21 B | xiv |
| of L. Superior | 171 | ii | ilmeneite, Baie St. Paul, Que. | 231 | vii |
| E. Young | 139 A | xiv | Examination by, of nickel ore | | |
| George | | | from Glamorgan tp. | 231 | vii |
| Serpentine mining by, near Gan- | | | S. S. | 133 | x |
| anoque | 297 | xi | T. | 51 A | xiv |
| | 13 A | xiii | W. B. | | |
| George W. | | | Brick-making by, Mitchell | 94 B | xv |
| Discoverer of Kirkwood nickel | | | W. E. | 130 | x |
| mine | 36 | viii | William | 251 | vi |
| H. E. | 33, 35 A | xvi | | 68 | viii |
| Joseph | 30 | vii | arsenic mine, ELZEVR TP., | | |
| Samuel | 104 | ix | HASTINGS CO. | | |
| | 260 | xi | Notes on | 102, 200 | xi |
| Thomas | 89 A | xv | Photo of | 112, 113 | xi |
| W. Howard | 160 A | xiv | | | |
| Iron Co. | | | | | |
| Cost of iron produced by | 336 | R C | | | |

| | Page. | Vol. | | Page. | Vol. |
|---|------------|------|---|-----------|------|
| James bay, HUDSON BAY. | | | Jarman pyrites mine, NEAR BAN- | | |
| Calcareous mud deposits in..... | 252 | v | NOCCKBURN, HASTINGS CO. | | |
| Climate of..... | 106 | iv | Bog-iron ore in, changed to iron- | | |
| Description of, by Bell..... | 130 | iv | pyrites..... | 42 A | xv |
| Fisheries of..... | 133 | iv | Idle, 1906..... | 79 A | xvi |
| Fossil-shells from, list of..... | 143 A | xiii | Mining class at..... | 39, 42 A | xv |
| Harbours of..... | 128, 129 | iv | Notes on, 1901..... | 295 | xi |
| Indians on, notes..... | 134 | iv | 1902..... | 139 | xii |
| Minerals S. of, possibility of..... | 69 | R C | 1903..... | 95 A | xiii |
| Railway to, need of..... | 56, 57 | R C | 1904..... | 78 A | xiv |
| Rising of, notes by Parks..... | 191 | viii | 1905..... | 94 A | xv |
| Rocks on and near..... | 86 | i | Jarvis, Æmilius | | |
| Devonian..... | 194 | viii | Director, Hamilton Iron and Steel | | |
| Huronian..... | 17 | R C | Co..... | 46 | v |
| limestone, bituminous..... | 128 | iv | John | | |
| Corniferous..... | 205 | v | Brick-making by, Stratford..... | 93 B | xv |
| ..... | 32 B | xiii | Peter | 33, 35 A | xvi |
| Niagara..... | 44 | R C | Samuel | 178 | ii |
| ..... | 31 B | xiii | Tennyson D. | | |
| Palæozoic..... | 5, 18 | R C | Report by, on agricultural possi- | | |
| ..... | 104 | iv | bilities of Abitibi dist..... | 121-131 A | xiii |
| Soil south of..... | 176 A | xiii | ref. to..... | 117 A | xv |
| agricultural..... | 108 | iv | Work by, 1903..... | xi, 104 A | xiii |
| notes by Barron..... | 115 | iv | Adams & Co. | 119 | ii |
| Timber near..... | 120, 121 | iv | Jarvis, WALPOLE TR., HALDIMAND CO. | | |
| bay, PIPESTONE LAKE, R. R. D. | 61 | v | Gas piped to..... | 23 A | xv |
| Bay Mining Co. | | | island, L. SUPERIOR. | | |
| Line of, to Moose mt..... | 39 A | xvi | Barytes on..... | 177 | i |
| lake, TIMAGAMI DIST., NIP. | | | Examined by Montreal Mg. Co..... | 139 | vi |
| Iron pyrites mining on..... | 20, 88 A | xv | Notes on, by McKellar..... | 198 | R C |
| See also Harris pyrites m. | | | Rocks on, notes by Coleman..... | 180 | ix |
| Mispickel mining on..... | 73 A | xiv | Worked by Montreal Mg. Co..... | 195 | R C |
| Pyrrhotite from, analysis..... | 180 | x | Island Co. | 196 | R C |
| ..... | 73 A | xiv | lake, E. OF MATTAGAMI RIVER, | | |
| tp., NIP. | | | ALG. | | |
| Cobalt and silver in..... | 45, 56 A | xvi | Beaver dams near..... | 127 A | xiii |
| discovery..... | 8 A | xvi | Description of..... | 105 A | xiii |
| Jameson, R. W. | 124 | vii | Dolerites on..... | 116 A | xiii |
| W. B. | 79 | xi | Porphyry near..... | 120 A | xiii |
| Jamesonite (FEATHER ORE). | | | Sericite-schist on..... | 120 A | xiii |
| Barrie tp..... | 200 | ix | tp., ALG. | | |
| Hardness of..... | 202 | vi | Iron in..... | 204, 315 | xii |
| Madoc tp..... | 161 A | xvi | mining. See Breitung Iron Co. | | |
| Notes on, by Goodwin..... | 209 | vi | Williams mine. | | |
| Specific gravity of..... | 202 | vi | Jasenitzer peat-digger. | 209 | xii |
| Jamieson, J. | 90 A | xv | Jasper. | | |
| J. A. | | | Associated with iron ores, occur- | | |
| Lime producing by estate of, | | | rences..... | 200, 201 | x |
| Milton..... | 28 | xii | Black bay, L. Superior..... | 100 | i |
| quarry, NEAR RENFREW. | | | Blanche River region..... | 221, 230 | xi |
| Analysis of limestone from..... | 105, 106 B | xiii | Bruce mines, north of..... | 72 | i |
| tp., NIP. | | | Definition of..... | 166 | x |
| Soil in..... | 127 A | xv | Description of..... | 536 | R C |
| Janes farm, TILBURY OIL FIELD. | 94 A | xvi | ..... | 224 | vi |
| Japan. |  |  | ..... | 200 | ix |
| Brimstone from, for sulphuric | | | Exhibit of, at World's Fair..... | 186, 187 | ii |
| acid..... | 179 | R C | Huronian rocks, with iron..... | 20 | R C |
| Nickel coinage in..... | 161 | ii | Labrador, with iron..... | 202 | x |
| Jaques, W. H. | | | Lake Huron, north of (pebbles), | | |
| Notes by, on nickel-steel for ord- | | | notes by Coleman..... | 162 | viii |
| nance..... | 139 | ii | Long island, Hudson bay..... | 93 | v |
| Paper by, on value of nickel-steel | | | Matawin range, with iron..... | 80, 131, | v |
| for armour..... | 194-198 | iv | river, "..... | 163 | ix |
| Jardine, Alexander | | | Mesabi iron range..... | 92 | v |
| Experiments by, on moss-litter..... | 23 | vii | Michigan iron range..... | 152 | ix |
| Jarecki Manufacturing Co. | 119 | ii | Michipicoten div., with iron..... | 11 Bull. | iii |
| Jarman, Z. H. See Jarman pyrites | | | Batchawana bay..... | 189, 190 | x |
| mine. | | | Goulais bay..... | 72 | i |
| | | | notes by Coleman..... | 183 | ix |

| | Page. | Vol. | | Page. | Vol. |
|--|------------|--------|--|---------|--------|
| Jasper. — <i>Con.</i> | | | Jeffrey mine, FARADAY TP., HASTINGS CO. | | |
| Moss tp. | 145 | R C | Mispickel in. | 198 | xi |
| Night-hawk lake. | 187 | x | assay. | 102 | xi |
| Nipigon Lake dist., with iron. 213, 214 | 311 | xii | Jelley, J. | 104 | vii |
| 111-122, 143, 147 | A xvi | | | 104 | viii |
| Windigokan lake. | 145 | A xvi | | 115 | ix |
| Rainy River dist., with iron. 129, 130 | 126 | R C | Jemerays, M. de la | | |
| Hunter island. | 200 | x | Fort St. Pierre built by. | 162 | v |
| Lac Seul, pebbles. | 74 | v | Jenckes, J. M. | 52 | ix |
| notes by Coleman. | 92 | v | S. W. | 52 | ix |
| Shining-tree lake. | 174, 184 | vi | Machine Co. | 168-170 | iv |
| Sudbury dist., with iron. | 187 | x | Jenitz, Hans | | |
| Taché, near. | 124 | vii | Cobalt works of, Schneeberg. .75, 76 | B xiv | |
| Timagami Lake region. | 57 | R C | Jenkins, Charles | | |
| with iron. | 165, 166 | x | Feldspar producing. | 38 | xii |
| Wanapitei lake, W. of, with iron. 180 | x | | | 21, 91 | A xiii |
| conglomerate. | | | | 19 | A xiv |
| Blanche river and vicinity. | | | | 19 | A xv |
| 174, 176, 179 | xii | | suspended. | 101 | A xv |
| Bruce mines. | 177 | ii | <i>See also</i> Harris f. m. | | |
| boulder. | 156 | viii | prospecting. | 82 | A xiv |
| Description of. | 158, 159 | viii | Notes by, on oil trade. | 27 | v |
| Kenogami Lake dist. | 230 | xi | | 17 | x |
| Lake Huron. | 135 | iii | | 40 | xi |
| Trout lake, N. of Echo lake, Alg. 124 | viii | | Norman Stuart | | |
| lake, HUNTER ISLAND. | | | Acknowledgments to. | 158 | x |
| Jasper ores on. | 200 | x | Manager for Great Northern Co. 152 | x | |
| Jaspilite. | | | Onaping Lake Mg. | | |
| Boston tp. | 262-267 | A xiv | Co. | 157 | x |
| Definition of. | 166 | x | Capt. Vaughan | 143 | ii |
| Iron lake, Michipicoten div., | | | William | | |
| analyses. | 320 | A xiv | Iron ore exhibited by, Chicago. 78, 79 | ii | |
| Shining-tree lake, notes. 178, 182, 185 | x | | Lodestone found by, near Madoc. 82 | ii | |
| Timagami dist.:— | | | Rocks in iron claim of. | 57 | ii |
| photos. | 176, 177 | x | Jenks, C. N. | 249 | vii |
| 336, 337 | xii | | Jenny Leigh gold mine, ANDREW BAY, L. OF THE WOODS. | | |
| coloured. | Frontis. | Vol. x | Notes on, 1897. | 112 | vii |
| report by Miller. | 167-180 | x | "Jenny Lind" ss. | 84 | viii |
| tests on, with Wetherill separator. | 336 | xii | "Jerker" system, for oil wells. .159 | R C | |
| Jawbone creeks, ABITIBI RIVER. | | | Jermyn st., LONDON, ENG. | 493 | R C |
| Notes on, by Parks. | 182 | viii | Jerusalem gold mine, NEAR MOOSE BAY, L. OF THE WOODS. | 21 | iii |
| Jay, Canada | | | JES 38, 39, 41, 42 gold locs. <i>See</i> | | |
| Abitibi dist. | 126 | A xiii | Nora gold mine. | | |
| JB 1 silver loc. <i>See</i> McKinley-Daragh mine. | | | 54, gold locs. <i>See</i> Tycoon gold mine. | | |
| 6 silver loc., COBALT, NIP. | | | 93, 110 gold locs. <i>See</i> Nina gold mine. | | |
| Photos of. | 20, 34 | B xiv | 154 gold loc., SCOTTY ISLAND, L. OF THE WOODS. | 42 | ix |
| Strike of veins in. | 26, 36, 37 | B xiv | Jessie Fraser Copper Mg. Co. | | |
| 7 silver loc. <i>See</i> New Ontario silver mine. | | | Capital and date of charter. | 30 | A xvi |
| AND JC Mining Development and Smelting Co. | | | Jessop, Thomas | 247 | i |
| Capital and date of charter. | 28 | A xv | and Sons, William | | |
| 66 gold loc. <i>See</i> Polaris gold mine. | | | Steel works of, notes by Tupper. 178 | c xiv | |
| 79, 80 gold locs. <i>See</i> Nora gold mine. | | | rapid, BONNECHÈRE RIVER. | | |
| 110 gold loc. <i>See</i> Scotty Island gold mine. | | | Marl near. | 107 | B xiii |
| Jean Petit rapid, ABITIBI BRANCH OF BLANCHE RIVER, NIP. | | | tp., Alg. | 127 | A xv |
| Description of, by Miller. | 224 | xi | and timber. | 139 | A xv |
| Jeffery, George E. | 48-50 | x | Jessop, Alexander R. | 224 | vii |
| Jeffries, William | | | C. W. | 74, 75 | A xiii |
| Nickel refining process patented by. | 220 | ix | Jewell, Fulton B. | 71 | viii |

| | Page | Vol. |
|---|----------------|------|
| Jex & Co. | | |
| Brick yard of, Cobourg..... | 85 B | xv |
| J. G. Gibson Marble and Granite Co. | | |
| Capital and date of charter..... | 11 | xi |
| Jimmy Kash lake, MICHIPICOTEN | | |
| DIV., ALG. | | |
| Description of..... | 289 A | xiv |
| Minor ref. to..... | 285 A | xiv |
| Rocks in..... | 348 A | xiv |
| JO 4 gold loc. See Golden Star mine. | | |
| 13 gold loc., NEAR WILD POTATO | | |
| LAKE, R. R. D..... | 68 | v |
| | 116 | vi |
| 41 Gold Mining Co. | | |
| Capital and date of charter..... | 8 | viii |
| Work by, 1898..... | 271 | viii |
| 114-116 gold locs. See Ontario | | |
| Prospecting, Mfg. and Dev. | | |
| Co. | | |
| Joachimsthal, BOHEMIA. | | |
| Cobalt at..... | 6, 51, 85 B | xiv |
| Minerals of, same as those in | | |
| Cobalt dist..... | 12 B | xiv |
| rare..... | 61 B | xiv |
| Job (Biblical) | 168 | i |
| Jobson, C. J. R. | 186, 196 | viii |
| Jocko river, OTTAWA RIVER. | | |
| Agricultural land along..... | 58 | R C |
| Joes (or MARION) lake, WISNER TP., | | |
| ALG. | | |
| Minor ref. to..... | 192 A | xiii |
| Moraine near..... | 102 C | xiv |
| Rocks on and near..... | 202 A | xiii |
| | 185 | x |
| | 72, 81 C | xiv |
| conglomerate..... | 94, 130, 131 C | xiv |
| diabase dike..... | 85 C | xiv |
| greenstone..... | 206 | x |
| nickel-bearing eruptive..... | 211 A | xiii |
| norite..... | 214 A | xiii |
| petrography..... | 295 | xii |
| Johanson, John | 255 | ii |
| John, David | 52 | ix |
| | 77 | x |
| | 51 A | xvi |
| Carruthers Science Hall, | | |
| KINGSTON. | | |
| Photo of..... | 192 | vi |
| Dwyer Gold Mg. Co. | | |
| See also Dwyer, John. | | |
| Dwyer gold mine. | | |
| Capital and date of charter..... | 10 | vii |
| "John Haggart" ss. | 193 | iii |
| John Sykes Mining and Milling Co. | | |
| Accident at mine of..... | 43 | x |
| Capital and date of charter..... | 10 | ix |
| Depth of shaft sunk by..... | 35 | ix |
| Work by, Minnitaki lake..... | 71, 72 | viii |
| | 64 | ix |
| Johnes, E. R. | 74 | xi |
| Johnny lake, NIP. | 35 B | xiv |
| Johns, David | 200, 201 | iv |
| I. H..... | 104 | viii |
| W. H..... | 16, 82 | xii |
| Johnsen, H. | 167 | iii |
| Johnson, A. | | |
| Mining by, Minnitaki lake..... | 70 | viii |

| | Page | Vol. |
|--------------------------------------|---------------|------|
| Johnson, A. | | |
| Mining by, Michipicoten div..... | 104 | viii |
| | 66 | xii |
| Albert | | |
| Killed at Big Master mine..... | 39-41 A | xiii |
| Albert | | |
| Foreman, Sultana g. m..... | 179, 238 | v |
| | 249, 250 | vi |
| | 43, 50 | viii |
| | 41 | ix |
| August | 31 | vii |
| Axel | | |
| Killed at Copper Cliff m..... | 201, 210, 244 | iv |
| C. J. | | |
| Galena mining by, Dorion tp.... | 38 | R C |
| Frank | 100 | ix |
| G. R. | | |
| Ref. to work by, on magnetic | | |
| concentration of iron ores..... | 337 | xii |
| Gus | 46, 48, 50 | x |
| Henry | 82 | ii |
| J. | | |
| Brick-making at, Monkton..... | 94 B | xv |
| Pembroke..... | 96 B | xv |
| Prof. J. B. | | |
| Formulae by, for steel and con- | | |
| crete..... | 175 A | xiv |
| J. Bristol | 54 | xi |
| J. H. | 104 | viii |
| L. H. | 243 | i |
| Samuel W. | | |
| Notes by, on processes for peat | | |
| drying..... | 194 | i |
| on mode of burning | | |
| peat..... | 206 | i |
| Tests, by, on peat as a fuel..... | 200 | ii |
| T. | 104 | vii |
| | 104 | viii |
| W. A. | 87 | ix |
| Sir William | | |
| Interested in copper mining, L. | | |
| Superior..... | 209 | v |
| apatite mine, LOUGHEBORE TP., | | |
| FRONTENAC CO. | | |
| Idle, 1892..... | 251 | ii |
| Operating, 1891..... | 240 | i |
| tp., ALG. | | |
| Copper mining in. See Stobie | | |
| copper mine. | | |
| Trap rock quarries on islands S. | | |
| of..... | 13 | v |
| Johnston, A. | 116 | ix |
| Anton | 43 | x |
| E. J. | 74 | xi |
| | 66 | xii |
| J. (CALABOGIE) | 55, 56 | xii |
| J. (SULTANA MINE) | 48 A | xiv |
| | 57 A | xv |
| J. A. | 128 | xi |
| J. B. | 113 | ix |
| J. F. | 104 | vii |
| J. H. | | |
| Gold mining by, near Wawa..... | 104, 194 | vii |
| J. W. | | |
| Gold mining by, near Michipi- | | |
| coten..... | 202 | vii |
| Iron mining by, Gros Cap..... | 145 | viii |
| Jacob | | |
| Killed at Sault Ste. Marie..... | 29 A | xv |

| | Page. | Vol. | | Page. | Vol. |
|--------------------------------------|-----------|-----------|--|----------|--------|
| Johnston, Jessie A. | 104 | vii | Jones, Pete | | |
| John (1809)..... | | | Jasper ore reported by, Point | | |
| On prospects of Sault Ste Marie.. | 198 | v | Aux Mines..... | 190 | x |
| John (1905)..... | 30, 33-35 | A xv | R. R. | | |
| John W. | | | Superintendent of smelter, Port | | |
| Gold mining by, Michipicoten | | | Arthur..... | 61 A | xv |
| div. (1871)..... | 11 | Bull. iii | | 61 A | xvi |
| | 195 | vii | Thomas R. | | |
| L. J. | | | Manager, Buffalo silver m., | | |
| Notes by, re gypsum in Oneida tp. | 122 | R C | Cobalt..... | 78 A | xv |
| R. A. A. | | | Sunbeam g. m..... | 81 | xii |
| Limestone analysis by, Barrie tp. | 45 | B xiii | | 71 A | xiii |
| Kingston | | | | 38, 41 A | xiv |
| (near)..... | 44 | B xiii | | 50 A | xv |
| Mackay | | | Tip-top copper m.... | 275 | xi |
| lake... .. | 38 | B xiii | | 56 A | xiii |
| Ramsay | | | | 56 | xii |
| tp..... | 71 | B xiii | W. M. H. | | |
| T. | 116 | ix | and Laughlins. See American | | |
| P. A. and Co. | | | Iron Works | | |
| Quarrying by, Niagara tp..... | 95 | i | A. O. & Co. | | |
| | 73, 74 | B xiii | Analysis of shale used by, | | |
| iron mine, MICHIPICOTEN DIV., | | | Zanesville..... | 119 | iii |
| ALG. | | | lake, SEINE RIVER DIST., R.R.D. | 127 | vii |
| Ferriferous sandstone in..... | 157 | ix | mill, BOSANQUET TP., LAMBTON | | |
| Johnstone—? | | | CO. | | |
| Exploratory work by, near Michi- | | | Section of strata at | 68 | B xiii |
| picoten..... | 253 | v | nickel mine, NEAR COPPER | | |
| Johnstown, CAMBRIA CO., PENN. | | | CLIFF, NIP. | | |
| Iron from, quality..... | 402 | R C | Notes on, 1896..... | 272 | vi |
| furnace..... | 125, 127 | ii | range, KEPPEL TP. GREY CO. | | |
| Jokela, Jan. | 33 | A xv | Cement works in..... | 17 | A xiii |
| Jokinen, John | 39, 41 | A xiii | See also Colonial Portland Cem- | | |
| Joliet Steel Co. | | | ent Co. | | |
| Analysis by, of iron ore, Blairton. | 130 | R C | Jonkoping, SWEDEN. | | |
| Joliette co., QUE. | | | Tests at, on moss-litter..... | 140 | iii |
| Grenville series in..... | 11 | R C | Jordan, D. | | |
| Jollineau, Stephen | 121, 136 | viii | Brick-yard of, Chatham..... | 72 | B xv |
| Jonah (BIBLICAL)..... | 166 | i | Jordan, LOUTH TP., LINCOLN CO. | | |
| Jones, A. S. | 104 | vii | Iroquois beach at..... | 228 | A xiii |
| C. C. | | | Joseph Laduc Gold Mfg. Co. | 10 | viii |
| Notes by, re hematite near Wylde. | 138 | xi | Powers Syndicate. | | |
| C. H. | 110 | ix | Copper mining by, Mississagi | | |
| Clarkson | | | river..... | 18 | viii |
| Part owner, Wendigo gold mine. | 44 | ix | Josephine iron mine, S. OF GOETZ | | |
| | 71 | x | LAKE, MICHIPICOTEN DIV. | | |
| Ephraim | | | Boring in, 1903..... | 47 | A xiii |
| Iron smelting by, Lyndhurst. | | | 1905..... | 71 | A xv |
| 1813..... | 319 | R C | plant purchased for..... | 42 | A xiii |
| H. | 52, 53 | B xiii | Cavern near..... | 171 | xi |
| H. C. | | | Minor ref. to..... | 20 | xii |
| Evidence by, re mining regula- | | | Notes on..... | 62, 63 | xii |
| tions..... | 316 | R C | Operating, 1901..... | 71, 95 | xi |
| Prof. J. V. | 507 | R C | Ore body of, extent..... | 103, 104 | xii |
| James | | | Prospects of, 1899..... | 195 | x |
| Manager, Stoness mica mine.... | 128 | xii | Rocks near..... | 160, 161 | xi |
| Owner, O'Mara mica mine..... | 194 | iii | conglomerates..... | 203 | x |
| John | | | mt., NEAR PIGEON POINT, | | |
| In Marmora iron foundry, 1826.. | 17 | ii | MINN. | | |
| John M. | | | Beaches on..... | 175 | ix |
| Acknowledgments to..... | 94 | xii | "Josie" ss. | 57 | ix |
| Captain, Bully Boy g. m..... | 51 | ix | | 59 | xii |
| Regina g. m..... | 92, 253 | vi | Joslin, F. M. | 75 | viii |
| | 56 | viii | Jowell, Albert A. | 507 | R C |
| | 73 | x | JS 14 silver loc. See La Rose mine. | | |
| | 255 | xi | "Jubilee" ss. | 43 | A xv |
| Manager, Stobie mine..... | 183 | iii | Jubilee gold mine, TRAFALGAR BAY, | | |
| | | | ANZHEKUMMING LAKE, R.R.D. | | |
| | | | Notes on, 1897..... | 76, 122 | vii |

| | Page. | Vol. |
|---|--------------------|------|
| Jubilee gold mine , S. OF WAWA LAKE, MICHIPICOTEN DIV. | | |
| Notes on, 1898..... | 145 | viii |
| Work at, 1897..... | 100 | vii |
| 1898..... | 102 | viii |
| 1899..... | 114 | ix |
| Mining Co. | | |
| Capital and date of charter..... | 9 | xii |
| Work by, Kajagogamog lake.... | 118 | vii |
| Judd, J. W. | | |
| Notes by, on corundum in Burma..... | 229, 231, 234, 241 | viii |
| Judge—? | 214 | xi |
| Frank | 31 A | xv |
| mills gold claim , NEAR MOORE BAY, L. OF THE WOODS..... | 21, 25 | iii |
| Judith mt. , FERGUS CO., MONTANA. | | |
| Analysis of tinguaité-porphyrý from..... | 189 | ix |
| Rocks in, like heronite..... | 190 | ix |
| Judson, J. N. | 16 C | xiv |
| Julia bay , MANITOULIN ISLAND, ALG. | | |
| Hudson River formation on..... | 77 B | xiii |
| river , L. SUPERIOR. | | |
| Character of..... | 284 A | xiv |
| Cross section of shore near..... | 336, 337 A | xiv |
| Iron bearing rocks near: appearance favourable..... | 339 A | xiv |
| notes by J. M. Bell..... | 333-335 A | xiv |
| Julian landing , STONY LAKE, PETER- BORO CO. | | |
| Rocks at..... | 210, 213 | viii |
| Jump Over falls , MATTAGAMI RIVER, ALG. | | |
| Country E. of, description..... | 146 A | xv |
| Description of river near..... | 123 A | xv |
| Rocks at..... | 134 A | xv |
| Soil from near, analyses..... | 152-154 A | xv |
| Waterpower of..... | 129 A | xv |
| Jumper island , ST. LAWRENCE RIVER. | | |
| Granite quarrying on..... | 296 | xi |
| <i>Junco hiemalis</i> . See Snow-bird, black | | |
| Junction lake , MICHIPICOTEN DIV., ALG. | | |
| Iron formation near..... | 178, 204 A | xv |
| Juneau , ALASKA. | | |
| Wire-rope tramway at..... | 353 | R C |
| Juneberry . See Shad-bush. | | |
| Junge Zeche vein , SCHNEEBURG, SAXONY..... | 89, 90 B | xiv |
| Juniata steel works , PITTSBURG. | | |
| Labour employed at, statistics. | 370 | R C |
| Juniper . | | |
| Michipicoten div..... | 296 A | xiv |
| Moose River basin..... | 176 A | xiii |
| <i>Juniperus communis</i> . See Juniper. | | |
| Jurassic system . | | |
| Definition of..... | 536 | R C |
| Jury copper mine , PATTON TP., ALG. | | |
| Development work at..... | 70 A | xvi |
| Shipping ore, 1906..... | 41 A | xvi |
| Jury Copper Mines . | | |
| Capital and date of charter..... | 30 A | xvi |

| | Page. | Vol. |
|--|------------|------|
| K 61=64 copper loc. See Tip-top copper mine. | | |
| 65 copper loc. , ROUND LAKE, TH. B. D..... | 75, 118 | v |
| 70, 76 gold locs. See Gold Hill mine. | | |
| 101 gold loc. , JAFFRAY TP., R. R. D..... | 174 | v |
| 223 gold loc. See Ferguson gold mine. | | |
| 231 gold loc. See Manhattan gold mine. | | |
| 157 island , L. OF THE WOODS, R. R. D..... | 104 | vi |
| Kaar, John | | |
| Brick-yard of, Brownsville..... | 86 B | xv |
| Kabagukski (Mud) lake , ANZHEKUM- MING LAKE, R. R. D. | | |
| Gold mining near..... | 85-87 | vi |
| | 77 | vii |
| | 68 A | xiii |
| See also Little Master gold mine. | | |
| Kabakishewishiwan falls , NETTO- GAMI RIVER. | | |
| Description of..... | 137 A | xiii |
| Diabase-porphyrý from, petro- graphy..... | 141 A | xiii |
| Kabaskong (INDIAN) . | | |
| Hammond gold reef found by.... | 64 | vii |
| Gold Mining Co. | | |
| Capital and date of charter..... | 10 | vii |
| Work by, Seine River dist..... | 54 | vi |
| Kabenung hills , MICHIPICOTEN DIV., ALG. | | |
| Altitude of..... | 282 A | xiv |
| lake , MICHIPICOTEN DIV. | | |
| Brulé patches on..... | 296 A | xiv |
| Canoë route to..... | 292, 293 A | xiv |
| Description of..... | 287 A | xiv |
| Minor ref. to..... | 285 A | xiv |
| Rocks on and near | | |
| 302, 304, 314, 315, 344, 348, 351 A | xiv | |
| Iron formation..... | 329, 330 A | xiv |
| See also Magnetic pt. | | |
| Kabetachewan (or Long) rapid , MAGPIE RIVER, ALG. | | |
| Description of river near..... | 286 A | xiv |
| Huronian rocks on..... | 348 A | xiv |
| Kabinakagami river , ALBANY RIVER. | | |
| Forest fire on..... | 177 A | xiii |
| Kaboosa, George | 123 | viii |
| Kagawong lake , MANITOULIN ISLAND. | | |
| Rocks on..... | 78 B | xiii |
| Waterpower on..... | 80 B | xiii |
| Kagegetechinuk , NETTOGAMI RIVER, ALG..... | 137 A | xiii |
| Kahn concrete system . | | |
| Description and illustration of... | 179 A | xiv |
| Kahwukekamastik river , FRENCH RIVER, MOOSE RIVER..... | 192 | viii |
| Kaiser Josef shaft , JOACHIMSTHAL, BOHEMIA..... | 63 B | xiv |
| Kajagogamog lake , L. OF THE WOODS DIST., R. R. D. | | |
| Notes on, by Coleman..... | 118, 119 | vii |

| | Page. | Vol. | | Page. | Vol. |
|--|----------|--------|--|----------|-------|
| Kakabeka falls, KAMINISTIKWIA RIVER. | | | Kaministikwia, TH. B. D. | | |
| Notes on..... | 133 | vii | Iron ore at..... | 129 | xi |
| Photo of..... Facing | 124 | vii | | 309 | xii |
| Pyrites mining near, 1900..... | 107, | x | Kalinite near..... | 194 | ii |
| 1901..... | 129 | xi | Lead at..... | 194 | ii |
| Rocks at and near..... | 129 | vi | | 201 | xi |
| Animikie..... | 67 | R C | lake, TH. B. D. | | |
| and Huronian..... | 129 | xi | Beaches on..... | 175 | ix |
| Stratified deposits near..... | 146 | xi | river, TH. B. D. | | |
| Waterpower of..... | 133 | v | Bridge across, built by Govt..... | 9 | vi |
| plant..... | 13 | A XV | Forest fires along..... | 205 | v |
| Kakagi (CROW) lake, S. E. OF SABAS-KONG BAY, L. OF THE WOODS. | | | Fort at mouth of..... | 197 | v |
| Area and depth of..... | 181, | v | Iron ore on..... | 22, 68, | R C |
| Beauty of..... | 203 | v | | 145 | i |
| Gold mining on. See Gold Sun mine. | | | evidence before R. C..... | 61 | R C |
| Notes on, by Coleman..... | 89 | vi | notes by Bell..... | 69 | ii |
| Water of, character..... | 185 | v | See also Kakabeka falls. | | |
| rapid, MISSINAIBI RIVER, ALG. | 195 | viii | Minor ref. to..... | 202 | v |
| Kakanaka lake, W. OF KAPISKASING LAKE, ALG. | 138 | ix | Nomenclature..... | 198 | v |
| Kaladar station, KALADAR TP., ADDINGTON CO. | | | Rocks on and near..... | 129 | vi |
| Laurentian hills near, character. | 39 | A XV | | 129, 130 | xi |
| and Angelsea Mg. and Development Co. | | | Animikie..... | 32 | R C |
| Capital and date of charter..... | 9 | viii | trap..... | 37 | R C |
| Kaladar diamonds. See Spinel, black Mining Co. | | | | 15 | v |
| Capital and date of charter..... | 10 | vii | Stratified deposits on..... | 146 | xi |
| tp., LENNOX CO. | | | Waterpower on..... | 133 | v |
| Actinolite in..... | 192 | ix | | 133, 252 | vii |
| | 27 | xi | plant..... | 13 | A XV |
| notes..... | 91, 92 | iii | Kaministiquia Power Co. | | |
| by James..... | 87 | R C | Work by, 1905..... | 13 | A XV |
| See also Actinolite, Ont.. | | | Kamikotaia lake, COFFEY RIVER, MATTAGAMI RIVER. | | |
| Cyanite in..... | 237 | vii | Description of, by Kerr..... | 119, 120 | A XV |
| | 200 | ix | Hematite near..... | 130, 133 | A XV |
| Gold in..... | 28, 111, | R C | Rocks near..... | 132 | A XV |
| | 199 | ix | Soil from, character and analysis. | | |
| mining, 1902..... | 112 | xii | | 151-154 | A XV |
| Rocks in, notes by Miller. 200-202, | 207 | xi | Trees on and near..... | 139, 140 | A XV |
| Steatite in..... | 210 | ix | river, MATTAGAMI RIVER, ALG. | | |
| Tale in..... | 99, 101 | iii | Description of..... | 128 | ix |
| | 210 | ix | Width of..... | 188 | A xiv |
| Kalevala Gold Mg. Co. | | | -Sagaigan river. See Coffey river. | | |
| Capital and date of charter..... | 10 | ix | Kamshogocka lake, MICHIPICOTEN DIV., ALG. | | |
| Kalinite (POLASSIUM ALUM). | | | Notes on, by J. M. Bell..... | 294, 295 | A xiv |
| Kaministikwia..... | 194 | ii | Kanagushka (Irch) lake, ALG. See Rice lake. | | |
| Slate river..... | 200 | ix | Kanakas. | | |
| Kallio, Jacob. | 39, 41 | A xiii | As miners in New Caledonia. 148, 149 | | ii |
| Kalmia (LAUREL). | | | Kanamascenceha lake, W. OF MATTAGAMI LAKE, ALG. | 130 | ix |
| On peat bogs..... | 139 | iii | Kane, Sir Robert | | |
| " <i>angustifolia.</i> | | | Notes by, on peat in Ireland. 192, 202 | | i |
| Abitibi Lake dist..... | 241 | A xiv | co., PENN. | | |
| Mattagami valley..... | 150 | A XV | Natural gas in..... | 152 | R C |
| " <i>glauca.</i> | | | mine, HUNTINGDON TP., HASTINGS CO. | | |
| Abitibi Lake dist..... | 241 | A xiv | Calcite in..... | 195 | ix |
| Mattagami valley..... | 150 | A XV | Kanonjapownakoka lake, NIVEN'S BASE LINE, ALG. | 136 | ix |
| Kames. | | | Kansas city, MONTANA, U.S. | | |
| See also Eskers. | | | Brick pavements in..... | 108 | iii |
| Definition of..... | 537 | R C | Paving clay from, analysis..... | 120 | iii |
| Sudbury, near..... | 102 | C xiv | state, U. S. | | |
| | | | Shales of, analysis..... | 120 | iii |

| | Page | Vol. | | Page | Vol. |
|--|----------|--------|---|----------|--------|
| Kaolin (CHINA CLAY) | | | Kashmir | | |
| Abitibi river..... | 4, 173 | i | Sapphires of..... | 230, 231 | viii |
| Annaberge, Saxony..... | 61 | B xiv | Kashwakamak (OR LONG) lake, | | |
| Composition of..... | 225 | vi | MISSISSIPPI RIVER, ONT. | | |
| Definition of..... | 537 | R C | Dikes on..... | 219 | v |
| Hamilton..... | 78, 86 | R C | Portages on..... | 218 | v |
| Hardness of..... | 202 | vi | Silver mining near. <i>See</i> Barrie | | |
| Middlesburg, S. Africa, gold in.. | 70 | B xiv | silver mine. | | |
| Missinaibi river..... | 70 | R C | Kasinggekechewan rapid , GROUND- | | |
| | 4, 173 | i | HOG RIVER, ALG..... | 133 | ix |
| | 127 | iv | Kaskemene = Powatik rapid , GROUND- | | |
| at World's Fair..... | 189 | A xiii | HOG RIVER, ALG..... | 132 | ix |
| Moose river..... | 202 | vi | Kasshabog lake . <i>See</i> Koshkabogamog | | |
| Specific gravity of..... | 202 | vi | lake. | | |
| Uses of..... | 225 | vi | Kasskulton, Louis | 34, 35 | A xvi |
| Wabiskaganii river, notes and | | | Kasson, B. Z. | 106 | x |
| analysis..... | 160 | A xiii | | 148 | xi |
| Kaolinic clays . | | | Katherine lead-zinc mine , LAKE | | |
| Abitibi dist., occurrences..... | xii | A xiii | TP., HASTINGS CO. | | |
| Kaolinite . | | | Boring in, with diamond drill, 58, 60 | | xi |
| Occurrences of..... | 200 | ix | Notes on, 1900..... | 129, 130 | x |
| Kapaskasi . <i>See</i> Kapiskasing. | | | 1905..... | 91 | A xv |
| Kapemichékama (OR CROSS) lake, | | | Rocks of and near..... | 207 | xi |
| HEADWATERS MATTAGAMI | | | diorite-gneiss..... | 199 | xi |
| RIVER, ALG..... | 250 | v | Work at, 1906..... | 79 | A xvi |
| | 131 | ix | Katossin, David <i>See</i> Katossin iron | | |
| Kapikokonaka lake , BLANCHE RIVER, | | | claims. | | |
| Nip. | | | iron claims , IRON RIVER, MICH- | | |
| Description of..... | 174 | xii | IPICOTEN DIV. | | |
| Kapinchigama lake , MICHIPICOTEN | | | Appearance of, favourable, 1904. | 339 | A xiv |
| DIV., ALG. | | | Jaspilite in..... | 309 | A xiv |
| Biotite schists on..... | 306 | A xiv | Minor ref. to..... | 311 | A xiv |
| Minor ref. to..... | 286 | A xiv | Notes on, by J. M. Bell. | | |
| Shape of..... | 293 | A xiv | 321, 322, 333, 336 | | A xiv |
| Kapiskasing lake , NIVEN'S BASE LINE, | | | Photo of..... | 322 | A xiv |
| ALG. | | | Rocks near..... | 316 | A xiv |
| Minor ref. to..... | 144 | A xiii | Katzenbach lake , MICHIPICOTEN DIV. | | |
| Notes on, by Parks..... | 137, 138 | ix | Absence of fish in..... | 297 | A xiv |
| Soil and timber near..... | 114 | iv | Rocks on and near..... | 349, 354 | A xiv |
| | 176, 177 | A xiii | Kawanaska river , BLACK RIVER, | | |
| river , TROUT RIVER, KAPIS- | | | ABITIBI RIVER. | | |
| KASING LAKE, ALG. | | | Notes on, by Bolton..... | 185 | xii |
| Minor ref. to..... | 136, 142 | ix | Kawacagoma lake , SOUTHEAST ALG. | | |
| Notes on, by Parks..... | 137 | ix | <i>See</i> Round lake, near Wene- | | |
| Kapismapenaceke lake , SPANISH | | | begon river. | | |
| RIVER. | | | Kawashaigamog (CLEAR WATER) | | |
| Rocks near..... | 126 | ix | lake, MCKENZIE TP., P.S.D. | | |
| Karcona, Peter | 47, 48 | xii | Limestone in..... | 93 | B xiii |
| Karoo (KIMBERLEY) shales..... | 123 | ix | Kawashegamuk (LONG) lake, S. E. | | |
| Kash lake . <i>See</i> Jimmy Kash lake. | | | OF DINORWIC LAKE, R.R.D. | | |
| Kashabowi , NEAR SHEBANDOWAN | | | Gold mining on..... | 63 | ix |
| LAKE, TH. B. D. | | | | 256 | xi |
| Copper mining near. <i>See</i> Tip- | | | Map of..... | 80 | vii |
| top copper mine. | | | Kawaskitoukik rapid , NETTOGAMI | | |
| lake , NEAR SHEBANDOWAN | | | RIVER, ALG..... | 137 | A xiii |
| LAKE, TH. B. D. | | | Kawawiagamak river . <i>See</i> Maligne | | |
| Description of..... | 117 | v | river. | | |
| Distance from, to Huronian g m. | 125 | v | Kawawiagamog lake , E. OF MOSS | | |
| Length of..... | 117 | v | TP., TH. B. D. <i>See</i> Round lake. | | |
| Notes on, by Blue..... | 116, 117 | v | river , CROSS LAKE, MOSS TP., | | |
| Rocks on, gneiss..... | 95 | v | TH. B. D. | | |
| Laurentian..... | 74 | v | Description of, by Blue..... | 120 | v |
| photo..... | 96 | v | Road near, description..... | 121 | v |
| Kashabowie Mining Co. | | | Kawchewahnook lake , OTONABEE | | |
| Capital and date of charter..... | 10 | vii | RIVER. | | |
| Kashegogamog lake , L. OF THE | | | Limestone on..... | 97 | B xiii |
| WOODS, ONT. | | | | | |
| Gneiss from, petrography..... | 146 | vii | | | |
| 14 M.I. | | | | | |

| | Page. | Vol. | | Page. | Vol. |
|--|----------|--------|--|----------|-------|
| Kawin station, SEINE RIVER DIST., R. R. D. Gold mining near. <i>See</i> Sunbeam mine. | | | Keewatin formation.—<i>Con.</i> | | |
| Kawukekamastuk river, FRENCH RIVER, MOOSE RIVER. Gypsum at mouth of..... | 158 | A xiii | Cobalt dist..... | 27 | B xiv |
| Kay, George F. Prospecting by, Sndbury dist.... | 289 | xii | Bucke tp., photo..... | 42, 43 | B xiv |
| Report by, on Atitibi region. 104-121 | A xiii | | description..... | 40 | B xiv |
| ref. to... 240, 248, 249 | A xiv | | notes and photos..... | 42-46 | B xiv |
| 117, 118 | A xv | | Comparison of, with Huronian.. | 158 | viii |
| Work by, 1900..... 151, 158, 186 | x | | L. of the Woods, photo of, in gneiss..... | 80 | vi |
| 1903..... | xi | A xiii | Quartz island, near..... | 119 | vii |
| Kearney, PERRY TP., P. S. D. Rocks in vicinity of..... | 171 | ix | Larder lake, notes by Brock..... | 208 | A xvi |
| Kearns, J. J. | 104 | vii | photos..... | 209, 214 | A xvi |
| 104 | viii | | section showing..... | 205 | A xvi |
| Keating, Walter J. 63, 70, 75 | ix | | Name proposed by Lawson..... | 19 | R C |
| William H. Notes by, on Indian cannibalism. 138 | v | | Nipigon Lake dist., divisions of, iron bearing..... | 112, 139 | A xvi |
| Ref. to work by on a visit to the source of St. Peter river..... | 63 | iii | petrography..... | 113, 114 | A xvi |
| Kechiperach, Joe 135 | A xiii | | Notes on, by Coleman..... | 152-157 | vii |
| Keefer, T. A. Evidence by, before R. C..... | 62 | R C | Rainy Lake dist :— gold bearing veins in..... | 59 | iv |
| Manager, Huronian mine..... | 123 | v | notes by Coleman..... | 46-49 | iv |
| Keek=keek lake, SHEBANDOWAN LAKE DIST. <i>See</i> Hawk lake. | | | petrography..... | 83-95 | iv |
| Keeley, C. | 142 | x | soapstone in..... | 73 | iv |
| Keen, Joseph | 207 | iv | Wabigoon (near)..... | 279 | viii |
| Keenan, C. | 142 | x | Timagami dist., ores of..... | 29-32 | B xiv |
| 74 | xi | | gold mine. <i>See</i> Hay Island mine. | | |
| 66 | xii | | Gold Mg., Prospecting and Development Co. | | |
| 48 | A xiii | | Capital and date of charter..... | 10 | vii |
| 72 | A xvi | | Lumber Co. Lease to, of Sultana island..... | 14 | iii |
| James | 66 | xii | Mill race of..... | 171 | v |
| 48 | A xiii | | Power Co. Capital and objects..... | 53 | vi |
| 35 | A xvi | | Keewatin Silver Cobalt Mg. Co. Capital and date of charter.... | 28 | A xvi |
| Keenora Mg. and Milling Co. Capital and date of charter..... | 9 | xii | Keewaydin Lumber Co. <i>See</i> Keewatin Lumber Co. | | |
| Properties of..... | 96 | xii | Keewenawan. <i>See</i> Keweenawan. | | |
| Keepawa. <i>See</i> Kipawa. | | | Keg lake, SHEBANDOWAN LAKE DIST. <i>See</i> Baril lake. | | |
| Kees, W. H. | 141 | x | Kehoe, J. J. | 203 | iv |
| Keewatin, NEAR KENORA, L. OF THE Woods. Flour mill at..... | 53 | vi | 273 | xi | |
| Map of, sketch..... | 168 | v | 56 | iii | |
| Minor ref. to..... | 169 | v | Keith, Alexander | | |
| Nickel mining near..... | 249 | ii | George E. Founder, Marmora Reduction Co..... | 236, 237 | iv |
| Population of..... | 171 | v | Kekek (OR KEEK-KEEK) brook, MAT-AWIN RIVER, TH. B. D. Notes on, by Blue..... | 128, 129 | v |
| Reduction works at, description. 60-62 | vii | | Kekekwabik lake, WHITE-CLAY RIVER, ATITIBI RIVER. Notes on, by Bolton..... | 184 | xii |
| 99 | viii | | Kelil, J. B. | 71 | ix |
| 88 | ix | | Kellar, E. K. | 127 | xii |
| operating. 89, 91 | x | | C. S. Brick-making by, Stratford. 12, 91, 92 | B xv | |
| 251 | xi | | Kellett, William Evidence by, re royalties in Gt. Britain. | | |
| photo.... 16, 96 | vii | | Kelley location (A. L. 111), SHOAL LAKE, SEINE RIVER, R. R. D. Notes on, by Coleman..... | 65 | v |
| 80, 81 | ix | | Kellog, Charles | 31 | ix |
| Water power at..... | 53 | vi | Kelly, Alfred | 35 | A xvi |
| channel, L. OF THE Woods. 168, 171 formation. | v | | D. L..... | 30 | vi |
| Animikie iron range, notes by Silver..... | 158, 159 | A xv | | | |
| Bad Vermilion lake, contact with granite, photo..... | 64, 66 | vi | | | |
| Boston tp..... | 262-266 | A xiv | | | |

| | Page. | Vol. |
|---|---------------|------|
| Kelly, Henry | | |
| Estimate by, of cost of pig-iron making, Toronto..... | 114 | ii |
| Thomas | 19 | ix |
| William | | |
| Evidence by, before R. C. re:— | | |
| free-trade..... | 234 | R C |
| lithographic stone, Marmora tp..... | 53 | R C |
| Lithographic stone quarry worked by, Marmora tp..... | 138 | iii |
| and Jones Co. | 119 | ii |
| island, L. ERIE. | | |
| Limestone from, as flux..... | 340 | R C |
| lake, SUDBURY DIST. | | |
| Rocks on and near..... | 296 | xii |
| gabbro..... | 240, 261, 263 | xii |
| 48, 77, 78 c | xiv | |
| greywacké and slate..... | 76, 89 c | xiv |
| quartz, mined for flux..... | 121 | xii |
| norite..... | 121 c | xiv |
| tp., NIP. | | |
| Gold mining in..... | 57 | vi |
| <i>See also</i> Gold Cliff mine. | | |
| Kelpin, C. P. | 44, 113 | vii |
| Kelso, NASSAGAWEYA TP., HALTON CO. | | |
| Lime-kilns at..... | 14 A | xiii |
| quarry at, photo..... | 48, 49 B | xiii |
| Kelvin, Lord | | |
| Letter from, to Carbide Willson..... | 160 | iv |
| Kemp, A. E. | 16 | v |
| Prof. J. K. | | |
| Views of, re deposition of Sudbury ores..... | 17 c | xiv |
| Kempfer — ? | 85 | vi |
| Kemptville, OXFORD TP., GRENVILLE CO. | | |
| Brick-clay in, notes on..... | 65 B | xv |
| Calceiferous formation in..... | 47 B | xiii |
| Character of country near..... | 217 | x |
| Kendall, E. H. | | |
| <i>See also</i> Kendall and Whiting. | | |
| Part owner, Gold Creek g. m..... | 232 | ii |
| Work by, for Sultana g. m..... | 48 | vii |
| and Whiting. | | |
| Copper mining by, L. of the Woods..... | 99 | vi |
| Gold mining by, L. of the Woods..... | 50, 107 | vi |
| Steamer of..... | 106 | vi |
| Work by, for Cornucopia g. m..... | 54 | vii |
| Kennebec tp., FRONTENAC CO. | | |
| Granite in..... | 202 | xi |
| Iron ore in..... | 45 | ii |
| Kennedy, E. C. | 87 A | xiii |
| H. W. | 67 | viii |
| J. | | |
| Gravel pits of, near Chrysler..... | 218 | x |
| Lime quarry and kiln of, photo..... | 126, 127 B | xiii |
| James C. | | |
| Notes by, on water-supply of Owen Sound..... | 55 | i |
| John | | |
| Gold mining by, L. of the Woods..... | 40 | vii |
| Manager, Gray Eagle gold mine..... | 59 | vii |
| Owner, King gold mine..... | 227 | iv |
| John Welford | | |
| Abitibi soils determined by..... | 130 A | xiii |

| | Page. | Vol. |
|--|---------------|------|
| Kennedy, M. | | |
| President, Imperial Cement Co..... | 17 B | xiii |
| Owen Sound Cement Co..... | 108 | ix |
| ..... | 17 | x |
| ..... | 32 | xii |
| ..... | 144 A | xiv |
| United Gas and Oil Co..... | 144 A | xiv |
| T. | | |
| Work by, 1897, Goulais River dist..... | 197, 199, 203 | viii |
| T. J. | 187 | vii |
| Cobalt, Ltd. | | |
| Capital and date of charter..... | 28 A | xvi |
| process (oil refining)..... | 165 | R C |
| Kenefic claim, ANGLESEA TP., ADDINGTON CO. | | |
| Arsenic in..... | 105 | xi |
| Kennelly, Dr. A. E. | 34, 36 | v |
| Kenny, T. | 104 | vii |
| Kenogamilake, BLANCHE RIVER, NIP. | | |
| Description of, by Bolton; geology of vicinity..... | 175-180 | xii |
| Minor ref..... | 248 A | xiv |
| Rocks near, petrographical notes..... | 189 | xii |
| lake, CHICOUTIMI CO., QUE. | | |
| Beryls on..... | 237 | vii |
| river, ALBANY RIVER. | | |
| Fossils on, marine..... | 50 | R C |
| Geological conditions on..... | 32 B | xiii |
| Lignite on..... | 52 R C; 125 | iv |
| Minor ref. to..... | 201 | v |
| Pleistocene deposits on..... | 137 | vii |
| Timber and soil on, notes by Bell..... | 112 | iv |
| Waterpower from..... | 252 | vii |
| Kenogaming lake, N.W. OF MATTAGAMI LAKE, ALG. | | |
| Route to, from Mesomekenda lake..... | 130 | ix |
| Kenogamissee lake, MATTAGAMI RIVER, ALG. | | |
| Notes on..... | 127, 128 | ix |
| Pine on..... | 141 | ix |
| portage, KENOGAMISSEE LAKE, ALG. | | |
| Description of..... | 127 | ix |
| Huronian rocks at..... | 131 A | xv |
| Waterpower at..... | 142 | ix |
| Kenoja (KENOZHA) lake, NIP. | | |
| Description of..... | 112 A | xiii |
| Kenora (RAT PORTAGE), L. OF THE WOODS. | | |
| Gold at, alluvial..... | 66 | R C |
| disputed titles..... | 446 | R C |
| mining, 1896..... | 6 Bull. | i |
| ..... | 108, 109 | vi |
| 1897-8..... | 57-59 | vii |
| <i>See also</i> L. of the Woods. | | |
| Govt. road to, from Rainy lake..... | 34 | vii |
| cost of..... | 9 | vi |
| Historical notes..... | 168-171 | v |
| Map of, sketch..... | 168 | v |
| Mining class at, 1894..... | 218 | iv |
| 1895..... | 6, 217 | v |
| 1896..... | 198 | vi |
| 1897..... | 261 | vii |
| Land agency at..... | 2, 3 | vii |
| 1900..... | 145, 146 | x |
| 1901..... | 80, 81 | xi |

| | Page. | Vol. | | Page. | Vol. |
|-------------------------------------|----------|--------|--|------------------|--------|
| Kenora.—<i>Ont.</i> | | | Kenty, John | 36 | vi |
| Land agency at.— <i>Ont.</i> | | | | 111 | vii |
| 1902 | 49 | xii | Keppel tp., GREY CO. | | |
| 1904 | 34 | A xiv | Cambro-Silurian in | 48 | B xiii |
| Recorder's office at | 36 | A xvi | Cement works in | 109 | i |
| Photos of, old | 128, 129 | v | <i>See also</i> Colonial Portland Ce- | | |
| Pyrrhotite near | 192 | ii | ment Co. | | |
| Reduction works at | 4 | i | Marl in | 31 | xii |
| municipal aid to | 31 | iii | | 17 | B xiii |
| notes by Blue | 187, 188 | v | | 140, | 159 |
| photo | 176, 177 | v | analysis | A xiv | |
| <i>See also</i> Dominion Gold Mfg. | | | and clay in, for cement.... | 19 | B xiii |
| and Red. Co. | | | Oil in, boring for | 24 | A xiii |
| Rocks at and near:— | | | Tar in | 543 | R C |
| conglomerate | 153 | vii | Kerbela (OR Meshed=Hossein), ASI- | | |
| | 184 | ix | ATIC TURKEY. | 166 | i |
| gneiss (quarry) | 76 | iv | Kerman, John | 125 | vii |
| notes | 118 | vi | Kerosine. <i>See</i> Oil. | | |
| sandstone, character | 183 | ix | Kerr, David G. | | |
| Saugeen clay near | 22 | B xv | Manager, Belmont g. m. | 89 | vii |
| Sampling works at, notes on.... | 62 | vii | | 40 | viii |
| Water-power belonging to | 14 | A xv | | 92 | ix |
| Mining Division. | | | | 114 | x |
| Creation of | 36 | A xvi | | 52, 63, 188-191, | 236 |
| Description of | 42-44 | A xvi | | 56, 111 | xii |
| Kenrick, E. B. | | | Cordova mine | 51 | A xiii |
| Smaltite observed by, McKim tp. . | 59 | B xiv | Craig corundum mine.... | 40, 74 | A xiv |
| Kensie, O. | 142 | x | | 40, 43 | A xv |
| | 74 | xi | Frontenac lead mine .. | 79 | A xvi |
| | 66 | xii | Kerr, Frederick | | |
| Kensington, LONDON, ENGLAND. | | | Brick making by, Burks Falls.... | 88 | B xv |
| Normal school at, notes on | 492 | R C | Crediton | 71 | B xv |
| iron mill, PITTSBURG. | | | H. L. | | |
| Labour employed at, statistics . | 370 | R C | Acknowledgments to | 53 | A xvi |
| Kent, Robert | 133 | x | Part owner, University mine.... | 85 | A xv |
| Bros. | | | Report by, on explorations in | | |
| Analysis of tale from property of. | 101 | iii | Mattagami valley | 116-135 | A xv |
| Mica mining by, Bols lake.... | 12, 92 | A xiii | Work by, 1905 | 47 | A xv |
| | 86 | A xiv | James | 162 | R C |
| 23, 89, 91 | A xvi | | John | 92 | A xvi |
| producing, 1904 | 20 | A xiv | Robert A. | 267 | vii |
| prospecting, 1905 | 103 | A xv | | 26, 27, 45, 79 | viii |
| Mica trimming works of, King- | | | | 66 | ix |
| ston | 291 | xi | lake, COBALT DIST., NIP. | | |
| | 131 | xii | Railway spur to | 10 | A xvi |
| | 92 | A xiii | Silver mining near | 38 | A xvi |
| | 86 | A xiv | <i>See also</i> Kerr Lake Mfg. Co. | | |
| | 105 | A xv | Drummond silver m. | | |
| | 91 | A xvi | Silver veins south of | 33, | 34 |
| Raymond mica mine worked by. | 126 | xii | Slate-breccia near | A xiv | |
| Stoness mica mine worked by... | 92 | A xiii | Lake (LAWSON) Mfg. Co. | | |
| co. | | | Capital and date of charter | 30 | A xvi |
| Brick-yards in, notes on | 72-74 | B xv | Close corporation | 13 | A xvi |
| Limestone in, Corniferous | 25 | B xiii | Exhibits of, at Pan-American Ex. | 25 | A xv |
| notes by Miller | 68 | B xiii | Notes on, 1905. | 83 | A xv |
| Natural gas and oil in | 29 | v | Producing, 1904 | 15 | B xiv |
| exploring for | 18-24 | vi | 1905 | 7 | A xv |
| notes | 123 | i | Lake (JACOBS) silver mine, | | |
| and borings. | | | COBALT, NIP. | | |
| | 109-111 | A xiv | Accident at | 34, | 35 |
| report by Knight | 92-104 | A xvi | Working, 1906 | A xvi | |
| ref. to | 21 | A xvi | Kerretichison, Robert. | 196 | i |
| <i>See also</i> Raleigh tp. | | | Kerry Mining Co. | | |
| Romney tp. | | | Capital and date of charter | 31 | A xvi |
| Oil and Gas Co. | | | Kerrwood, ADELAIDE TP., MIDDLE- | | |
| Capital and date of charter | 11 | xi | SEX CO. | | |
| Kentucky, U. S. | | | Brick-yard at, notes on | 79 | B xv |
| Lithographic stone from, analysis. | 182 | ii | | | |
| Natural gas in | 115, 116 | i | | | |

| | Page. | Vol. | | Page. | Vol. |
|--|---------------|-----------|---|---------------|---------|
| Kesagami lake, KESAGAMI RIVER, NIP. | | | Keweenaw formation.—<i>Con.</i> | | |
| Explorations on, ref. to..... | xii | A xiii | Lake Superior.— <i>Con.</i> | | |
| Forest fires south of..... | 177 | A xiii | Michipicoten island..... | 9 | Bull. 3 |
| Lignite on..... | 174 | A xiii | notes by Coleman..... | 168, 169 | viii |
| Map of, sketch..... | 149 | A xiii | Irving..... | 76-78 | iii |
| Minor ref. to..... | 137 | A xiii | occurrences..... | 69 | iii |
| Moose on..... | 178 | A xiii | petrography..... | 170-172 | viii |
| Notes on..... | 141 | A xiii | Pukaskwa river (near)..... | 143 | viii |
| Peat on..... | 174 | A xiii | Michipicoten div..... | 204 | vii |
| notes by J. M. Bell..... | 148, 150 | A xiii | notes by Moore..... | 204 | A xv |
| photos..... | 144, 145, 151 | A xiii | photos..... | 168, 169 | viii |
| Soil around..... | 176 | A xiii | | 190 | A xv |
| river, HANNAI BAY, JAMES BAY. | | | Nipigon Lake dist..... | 119, 133 | A xvi |
| Minor ref. to..... | 148 | A xiii | notes by Coleman..... | 131, 132 | A xvi |
| Notes on, by J. M. Bell..... | 137 | A xiii | Moore..... | 147, 148 | A xvi |
| Peat on, analysis..... | 175 | A xiii | Notes on, by International Com- | | |
| Kettle creek, ELGIN CO. | | | mittee..... | 271-277 | A xiv |
| Boring near, for water..... | 60 | i | Silver Mt. area, Th. B. d..... | 31 | R C |
| falls, ABITIBI RIVER. | 183 | viii | Sudbury dist., divisions..... | 14 | C xiv |
| falls, NAMAKAN RIVER, R. R. D. | 161 | v | Keystone (or CLIMAX) silver mine, NEAR SILVER CREEK, TH. B. D. | | |
| falls, SPANISH RIVER, ALG. | | | Acquired by Consolidated Mines | | |
| Rocks at..... | 81 | i | Co..... | 19, 256 | xi |
| -holes or Pot-holes. | | | Inspector's report on, 1891..... | 96 | xii |
| Dog river, L. Superior..... | 141 | viii | 1892..... | 227, 233, 239 | i |
| Peninsula (near)..... | 112 | vi | Keystone Rolling Mill, PITTSBURG. | | |
| Quinze river, Que..... | 227 | xi | Iron and steel output, 1893..... | 119 | ii |
| Sudbury dist..... | 102 | C xiv | Labour employed by, statistics.. | 370 | R C |
| Wanapitei, near..... | 167 | vi | Keystone vein, GRANITE LAKE, L. OF THE WOODS. | | |
| lake, FALCONBRIDGE TP., NIP. | | | Character of..... | 25 | iii |
| Photo of..... | 102 | C xiv | Kharkoff prov., RUSSIA. | | |
| pt., BOSANQUET TP., L. HURON. | | | Peat in..... | 216 | ii |
| Cincinnati anticline near..... | 42 | R C | Khorsabid, ASIA MINOR. | | |
| | 116 | i | Brick of..... | 107 | iii |
| Humboldtine in..... | 194 | ii | Kiaskho river, NETTOGAMI RIVER, ALG. | | |
| | 198 | ix | Black-clay shales near..... | 161 | A xiii |
| Oil at..... | 206 | ix | Rocks at mouth of..... | 142 | A xiii |
| Oxalite at..... | 206 | ix | Kidd, Benjamin | | |
| Shales from, analysis..... | 156 | xii | Notes by, on political economy.. | 9 | iv |
| pt., RAINY LAKE, R. R. D. | | | Joseph | | |
| Scenery near..... | 160 | v | Salt-making by, at Goderich .. | 150 | R C |
| portage, GROUND-HOG RIVER, ALG. | 133 | ix | W. G. | 81 | ii |
| Kettle, Charles | | | | 191 | iii |
| Evidence by, before R. C. re:— | | | tp., ALG. | | |
| gold, Waters tp..... | 112 | R C | Soil in, and timber..... | 120, 127, 140 | A xv |
| staking claims..... | 310 | R C | Kidney diseases. | | |
| Gold mining by, Waters tp..... | 112 | R C | Water for, Port Colborne..... | 129 | i |
| Keweenaw pt., L. SUPERIOR, U. S. | | | Kieff prov., RUSSIA. | | |
| Copper on..... | 36 | R C | Peat in..... | 216 | ii |
| | 63, 83-86 | iii | Kiely, Thomas B. | | |
| | 208 | v | Kikenda Onegum (KETTLE PORTAGE), GROUND-HOG RIVER, ALG. | 133 | ix |
| early mining..... | 145 | ix | Kilbourn, F. A. | 31 | xii |
| Rocks on, cupriferos..... | 83-86 | iii | | 17 | B xiii |
| Keweenaw..... | 36 | R C | | 148 | A xiv |
| | 69, 76 | iii | G. S. | 108 | ix |
| sandstone..... | 133 | vi | J. M. | 154 | A xiv |
| Keweenaw formation. | | | | 17 | x |
| See also Nipigon formation. | | | | 31 | xii |
| Animikie iron range..... | 256 | A xiv | | 17 | B xiii |
| Copper deposits of, notes by Ir- | | | | 148 | A xiv |
| ving..... | 82-88 | iii | | 154 | A xiv |
| Crooks tp..... | 146 | ix | | 17 | x |
| Iron lake, McTavish tp, photo.. | 169 | A xv | | 31 | xii |
| Lake Superior..... | 36, 67 | R C | | 17 | B xiii |
| Black bay, gold in..... | 39 | iv | | 148 | A xiv |
| Gargantua cape..... | 9 | Bull. iii | Kilkenny harbour, L. SUPERIOR. | | |
| Michigan, notes by Coleman.. | 144 | xi | Beaches on, level..... | 155 | viii |
| | | | Description of shores near..... | 134 | viii |

| | Page. | Vol. | | Page. | Vol. |
|---|-------------|------|--|----------|------|
| Killaloe, HAGERTY TP., KENFREW CO. | | | King, Dr. Edmund E. | | |
| Cambro-Silurian near..... | 104 B | xiii | Manager, United Gas and Oil Co. | 43 | xi |
| Stratified deposits near, altitude. | 223 | x | Man. Director, National Gas and Oil Co..... | 28 | v |
| Killaby loc., KILLABY TP., L. HURON. | | | President, Sentinel Con. Gold Mfg. Co..... | 64 | viii |
| Azurite in..... | 195 | ix | Francis P. | | |
| Killarney, RUTHERFORD TP., ALG. | | | Ref. to work by, on corundum deposits of Georgia..... | 62 | vi |
| Building-stone near (quartzite)... | 93 | i | Neil A. | 7 A | xvi |
| Geology of vicinity..... | 83 | i | S. A. | 104 | viii |
| Huronian at..... | 63 | R C | Dr. S. A. | 117 | i |
| Iron ore near..... | 59 | R C | and Mulligan. | | |
| magnetic..... | 64 | ii | Brick producing, 1902..... | 29 | xii |
| Quartz crystals near..... | 208 | ix | Cobalt Mining Co. | | |
| Silver near..... | 60 | R C | Capital and date of charter..... | 28 A | xvi |
| Stone near, for glass-making.... | 94 | i | Work by, 1905..... | 81 A | xv |
| (SHIRAOANANING) bay, L. HURON. | | | Cobalt silver mine, COLEMAN TP. See last ref. | | |
| Contact, Huronian and Laurentian, north of..... | 68 | i | Edward gold mine, MANTOU LAKE, R.R.D. | | |
| Diabase dikes near..... | 76 | i | Idle, 1904..... | 51 A | xiv |
| Quartzites west of..... | 72 | i | Notes on, 1903..... | 69, 70 A | xiii |
| harbour, L. SUPERIOR. See Kilkenny harb. ur. | | | Edward Hotel, TORONTO. | 91 B | xiii |
| Kilman, A. H. | 135 | i | Edward Mine, Ltd. (BRUCE MINES). | | |
| Kilns. | | | Capital and date of charter..... | 37 A | xiii |
| For cement making, notes and diagrams..... | 126-130 A | xiv | Edward Oil Co. | | |
| For magnetic iron ores..... | 478 | R C | Capital and date of charter..... | 37 A | xiii |
| For roasting pyrites, notes by Fraleek..... | 194 A | xvi | gold mine, L. OF THE WOODS, R.R.D. | | |
| See also Brick kilns. | | | Notes on, 1894..... | 227 | iv |
| Lime kilns. | | | 1896..... | 97 | vi |
| Rotatory kilns. | | | lake, SEINE RIVER, R.R.D. | | |
| Taylor kilns. | | | Gold mining on..... | 79 | ix |
| Kilpatrick, Thomas N. | 50, 277 | xi | of all the Mountains, GOULAIS BAY, L. SUPERIOR. | | |
| Kilrush, CLARE CO., IRELAND. | 202 | i | Altitude of..... | 150 | viii |
| Kimball, Hattie AND W. | | | oil well, PETROLEA. | 165 | R C |
| Gold mining by, Michipicoten div..... | 192 | vii | street, HAMILTON. | | |
| licence..... | 104 | vii | Remains of vertebrates in gravel in..... | 229 A | xiii |
| | 104 | viii | Kingfisher, belted | | |
| | 116 | ix | Abitibi dist..... | 126 A | xiii |
| | 142 | x | Kinglet, golden crested | | |
| | 74 | xi | Abitibi dist..... | 243 A | xiv |
| | 66 | xii | King's College, WINDSOR, N. S. | | |
| Kimberley, P. L. | 275 | xi | Notes on, by Richards..... | 511 | R C |
| Kimberley, SOUTH AFRICA. | | | Kingsmill, A. | 111 | vii |
| Diamonds at..... | 122 | ix | J. J. | 31 | v |
| (OR INDIAN LAKE) copper mine, ABERDEEN TP., ALG. | 100 | xii | | 145 | vi |
| (OR KAROO) shales. | 123 | ix | Nicol | 77 | v |
| Kincardine, KINCARDINE TP., BRUCE CO. | | | tp., NIP. | | |
| Artesian well in..... | 58 | i | Muskeg and timber in..... | 141 A | xv |
| Limestone quarry near..... | 35 B | xiii | Kingston, FRONTENAC CO. | | |
| Onondaga formation at..... | 45 | R C | Altitude of..... | 221 | x |
| Salt at..... | 45, 55, 189 | R C | Anthraxolite near..... | 6 Bull. | ii |
| notes by Merritt..... | 183 | R C | | 165 | vi |
| record of boring..... | 184 | R C | analysis..... | 163 | vi |
| Salt at, works..... | 22 A | xiii | | 194 | ix |
| | 20 A | xiv | Beaches near..... | 241 A | xiii |
| | 23 A | xvi | Blast furnace at, for iron, projected..... | 32 | iv |
| See also Ontario People's Salt Co. | | | | 17 | ix |
| Kineon, S. P. | 61 A | xiii | lead..... | 175 | i |
| King, Clarence | | | | 191 | ii |
| Notes by, on utility of mining statistics..... | 412, 413 | R C | | 234 | vii |
| Warning by, re picking eyes of a mine..... | 158 | vi | | 11 A | xiii |

| | Page | Vol. |
|---|------------------|--------|
| Kingston, FRONTENAC CO.—<i>Con.</i> | | |
| Brick moulding-plant at, photo | 44 | B XV |
| yard at, analysis of clay for | 17 | B XV |
| notes | 64, 65 | B XV |
| Celestite from | 193 | ii |
| exhibited at World's Fair | 190 | ii |
| baryt -celestite | 195 | ix |
| Fort Frontenac the original name of | 196 | v |
| Granite quarrying at, evidence before R. C. | 83, 84 | R C |
| notes by Merritt | 74 | R C |
| Lead north of | 191 | ii |
| Limestone buildings of | 24 | B xiii |
| quarries near | 43 | B xiii |
| analysis | 44 | B xiii |
| Mica trimming works at | 135 | x |
| | 28, 291 | xi |
| | 92 | A xiii |
| | 86 | A xiv |
| | 105 | A xv |
| Mineral spring at, analysis | 204 | ix |
| Rocks at and near :— | | |
| greenstone dikes | 15 | v |
| Paleozoic | 40 | R C |
| | 27 | B xiii |
| School of Mines at. <i>See</i> Kingston School of Mines. | | |
| Science Hall of, improvement in | 60 | x |
| Strontium at | 60 | B xiii |
| University at. <i>See</i> Queen's University. | | |
| Zinc-blende at | 209 | ix |
| and Pembroke Iron Mg. Co. | | |
| Bedford and Lizzie mines owned by | 30, 31 | viii |
| Capital and date of charter | 10 | vii |
| Estimate by, of cost of producing pig-iron | 391 | R C |
| Mining by | 135 | R C |
| and Pembroke Ry. <i>See</i> Kingston dist. | | |
| Apatite deposits in | 53, 167-177, 402 | R C |
| Feldspar in | 19 | A xv |
| | 21 | A xvi |
| for pottery | 205 | ix |
| <i>See also</i> Frontenac co. and Kingston Feldspar & Mg. Co. | | |
| Iron ores in | 58-62 | ii |
| character | 392 | R C |
| cost of production | 336, 337, 391 | R C |
| evidence before R. C. 52, 131-141 | | R C |
| mining, Bagot tp. | 275 | v |
| notes by Merritt | 127-129 | R C |
| Rocks in, mica-schists | 101 | B xiii |
| Feldspar and Mining Co. | | |
| Accident to employee of | 31 | A xv |
| Feldspar mining by, Bedford tp. | 81 | A xiv |
| notes on | 39 | xi |
| | 38 | xii |
| | 21 | A xiii |
| | 19 | A xiv |
| and photos of workings | 99, 100 | A xv |
| Richardson mine owned by | 85 | A xvi |

| | Page | Vol. |
|---|--------------|--------|
| Kingston Mills, KINGSTON TP., FRONTENAC CO. | | |
| Hamilton formation at | 99 | A xiv |
| <i>Pilocerus</i> at | 59 | B xiii |
| Mining and Development Co. | | |
| Feldspar mining by, near Verona | 102 | A xv |
| | 21 | A xvi |
| Phosphate Co. | | |
| Capital and date of charter | 10 | vii |
| Mining by, Storrington tp. | 230 | i |
| School of Mining and Agriculture. | | |
| Description and objects of | 195-197 | vi |
| Field class of, 1895, notes by | 218-220 | v |
| Miller | 213-215 | v |
| Notes on, 1895 | 58-60 | x |
| Organization and management of | 170-180 | iii |
| Photos of | 192, 193 | vi |
| | 18, 49 | x |
| | Frontis. pt. | B xiii |
| | 48, 49 | B xiii |
| Report on, 1898, by Goodwin | 259-263 | vii |
| Shipment from Larder lake, treated at | 216 | A xvi |
| Kingsville, S. GOSFIELD TP., ESSEX CO. | | |
| Mineral water in | 60 | i |
| Natural gas in | 42, 151 | R C |
| | 114 | A xiv |
| boring for | 153 | R C |
| | 28 | v |
| | 20 | x |
| exhausted | 22 | A xiii |
| notes by Stiff | 43 | xi |
| Oil in, notes on, 1890 | 117-120 | i |
| On Cincinnati arch | 42 | R C |
| Uplift near | 156 | i |
| Water-supply of | 60 | i |
| Natural Gas and Oil Co. | | |
| Notes on, 1890 | 117-120 | i |
| Operating, 1895 | 29 | v |
| Kinmount, SOMERVILLE TP., VICTORIA CO. | | |
| Graphite near | 93 | A xiii |
| Iron at, cost of producing | 331, 332 | R C |
| furnace | 326, 324 | R C |
| Kinnicutt, Dr. L. P. | 34, 36 | v |
| Kinniwabik lake, MORGAN AND LEVACK TPS. <i>See</i> Moose lake. | | |
| Kinnushaw, A. | 142 | x |
| Kinshor, A. | 104 | vii |
| Kioshwabic, (OR GULL) lake, WEST OF KAPISKASING LAKE, ALG. | 138 | ix |
| Kipawa lake, PONTIAC CO., QUE. | | |
| Grenville limestone near | 102 | A xiii |
| river, KIPAWA LAKE, QUE. | | |
| Rocks on | 162 | x |
| Kipp Oil Co. | | |
| Capital and date of charter | 37 | A xiii |
| Working in Raleigh tp. | 104 | A xvi |
| oil field, RALEIGH TP., KENT CO. | | |
| Notes on, by Knight | 104 | A xvi |
| Kippin, C. E. <i>See</i> Gurd and Kippin. | | |
| Kirk gold mine, THE NEW KLONDIKE, R.R.D. | 42 | viii |
| lake, COBALT DIST., NIP. 35, 45, 46 | | B xiv |

| | Page. | Vol. | | Page. | Vol. |
|---|----------|--------|--|------------|--------|
| Kirkaldy—? | | | Kitchimene lake.—Con. | | |
| Torsion tests by, on iron | 385 | R C | Map of, sketch | 178 | vi |
| Kirkegaard, P. | | | Rocks on and near | 179 | vi |
| Manager, Deloro g. m. | 60 | vi | Snowfall at, Sept. 19th | 184 | vi |
| | 91 | vii | Kitely, H. and T. | 104 | viii |
| | 40 | viii | | 116 | ix |
| | 91 | ix | Kitley tp., LEEDS CO. | | |
| | 115 | x | Calceiferous formation in | 72 | B xiii |
| 62, 195, 196, | 232 | xi | Kitson, Arthur. | 56 | iii |
| | 56, 109 | xii | Sir James | | |
| for Corundum Refiners, | | | On nickel-steel | 365 | R C |
| Ltd. | 21 | A xiii | in British Navy | 110 | ii |
| Notes by, on Deloro g. m. | 103 | xi | prospects | 385 | R C |
| Pamphlet by, for Pan-American | | | Kittridge, H. | | |
| Exhibition | 85 | xi | Evidence by, before R.C. re:— | | |
| ref. to | 32 | B xiv | oil borings, Glencoe | 55 | R C |
| Mrs. P. | 56 | xii | Petrolea | 161 | R C |
| Kirkgaarde and Chisholm. | | | Kitts, John | 48, 49, 57 | xi |
| Zinc mining by, Olden tp. | 94 | A xv | Kittson, H. N. | 54 | vi |
| Kirkfield, ELDON TP., VICTORIA CO. | | | Kjellin, K. | | |
| Peat bog at, notes | 209 | xii | Analysis by, of tinguaita | 189 | ix |
| See also Trent Valley Peat Fuel Co. | | | Klein, M. E. | | |
| Kirkintilloch, SCOTLAND. | | | Notes by, on asbestos | 94 | iii |
| Nickel-steel works at | 147 | ii | Logan Co. | 120 | ii |
| Kirkland, A. H. | | | Klinck Brick & Stone Slab Co. | | |
| Notes by, on preparation of lead | | | Capital and date of charter | 10 | vii |
| arsenate | 113 | xi | Klock, James. | 268 | vi |
| Kirkley, William. | 111 | vii | Klondike and North-West Mg. | | |
| Kirkpatrick, G. B. | 6 | vi | Corporation. | | |
| George Airey | | | Capital and date of charter | 10 | vii |
| Transmittal letter to, 1894 | i | iii | The New See New Klondike. | | |
| 1895 | i | iv | Klugh, A. B. | 240 | A xiv |
| Kirkwood, Thomas | | | Knechtel, D. | 31 | xii |
| Beaver farm of, Parisian isle, U.S. | 110 | v | | 17 | B xiii |
| Kirkville mill stream, NEAR OWEN | | | | 142 | A xiv |
| SOUND, P.S.D. | | | J. S. | 31 | xii |
| Pleistocene deposits near | 151 | viii | | 17 | B xiii |
| Kirkwood, T. N. See Kirkwood | | | Kneebone, T. H. | 63 | xii |
| nickel mine. | | | Knickerbocker inlet, L. OF THE | | |
| nickel mine, GARSON TP., SUD- | | | Woods, R.R.D. | | |
| BURY DIST. | | | Notes on, by Coleman | 119 | vii |
| Idle, 1902 | 256 | xii | Knife lake, DOG RIVER, L. SUPERIOR. | | |
| Notes on, 1899 | 36, 37 | viii | Length of | 285 | A xiv |
| Rocks at and near:— | | | Minor ref. to | 292 | A xiv |
| norite | 112 | C xiv | Notes on, by Willmott | 140 | viii |
| notes by Coleman | 61 | C xiv | Railway near, proposed | 289 | A xiv |
| structure | 81 | C xiv | Knife lake, RAINY LAKE, U.S. | | |
| Kishkutena gold mines, MANITOU | | | Graywacke on | 255 | A xiv |
| LAKE, R.R.D. | | | Iron ore on | 65 | ii |
| Notes on, 1897 | 122 | vii | Knight, Cyril W. | | |
| hills, MANITOU LAKE DIST., R. | | | Paper by, and Miller, on Gren- | | |
| R. D. | | | ville-Hastings unconformity. | | |
| Altitude of | 44 | iv | | 221, 222 | A xvi |
| Kitchener, B. | 142 | x | Report by, on Oil and Gas in | | |
| | 74 | xi | Kent co. | 92-104 | A xvi |
| tp., Nip. | | | ref. to | 24 | A xvi |
| Iron ore in | 216, 219 | A xiii | Silver Bar mine located by | 86 | A xv |
| Kitchi schists. | | | Work by, 1905 | 40 | B xiv |
| Age of | 185 | ix | 1906 | 2, 14 | A xvi |
| Marquette region, U.S. | 202 | x | Knobel, H. E. | | |
| -Gammi Gold Mining Co. | | | Experiments by, on Loon lake | | |
| Capital and date of charter .. | 9 | x | iron ores | 172 | A xv |
| Mining by, Michipicoten div. .. | 47, 48 | A xiii | Iron prospecting by:— | | |
| | 35 | A xiv | Atikokan range | 266 | xi |
| Kitchimene lake, ALG.-NIP. BOUND- | | | | 156 | A xv |
| ARY LINE. | | | Loon Lake range | 254 | A xiv |
| Country near, notes on | 177 | vi | Knopiala, Elias. | 45, 50 | x |
| Drift deposit near | 183 | vi | | | |
| Glacial striae on | 181 | vi | | | |

| | Page. | Vol. | | Page. | Vol. |
|---|---------------|-------|--|--------------|--------|
| Knotenschiefer. | | | Koskela, Alexander | 35 | A xvi |
| Slate resembling, Matawin iron | | | Kosola, Isaac | 46 | x |
| range..... | 83 | v | Krapotkin, Prince | 144 | vii |
| Knott claim, REDDICK GROUP, LARDER | | | Krean (or CREAN) Hill mine, DEN- | | |
| LAKE, NIP. | | | ISON TP., ALG. | | |
| Notes on, by Brock..... | 216, 217 | A xvi | Evidence <i>re</i> , before R. C. | 105, 431 | R C |
| Knox tp., ABITIBI DIST. | | | Gold in..... | 32 | iv |
| Fall of Abitibi river in..... | 186 | A xiv | Notes on, 1905..... | 64 | A xv |
| Greenstone in..... | 201, 206 | A xiv | by Merritt..... | 89 | R C |
| Soil in..... | 233 | A xiv | Ores of, lime required for fluxing. | 66 | A xvi |
| analysis..... | 246 | A xiv | Rocks in and near..... | 76 | i |
| Timber in..... | 233, 244 | A xiv | | 32 | iv |
| poplar, photo..... | 216 | A xiv | | 31, 32 | C xiv |
| windfalls..... | 199 | A xiv | Work in, 1904..... | 71 | A xiv |
| | | | 1906..... | 62, 64 | A xvi |
| Kobold, G. A. | | | Kreifinger, —? | | |
| Gold prospecting by, Jaffray tp. | 185 | v | Cobalt mining by, Saxony.... | 78, 79 | B xiv |
| Gold Mining Co. | | | Kreismann, R. D. | 74 | xi |
| Capital and date of charter..... | 10 | vii | Krelintz, F. M. | 142 | x |
| Koch and Mannhardt's peat pro- | | | Krelwitz, E. F. | | |
| cess. | 217 | ii | Iron mining by, Aberdeen tp. | 76, 77 | A xiii |
| Koehler and Strong | 120 | ii | Krilobsky, Moscow PROV., RUSSIA. | | |
| Koenig, Dr. A. | | | Peat at..... | 217 | ii |
| Experiments by, on sphagnum | | | Krom, S. R. | 338 | xii |
| moss..... | 122, 123, 140 | iii | Kronk, J. F. | 104 | vii |
| Kohler, Father | 173 | ii | Kroskie, H. | 167 | iii |
| Kohlsville, WASHINGTON CO., WIS. | | | Krupp, Frederick | | |
| Diamonds at..... | 120 | ix | Armour plates of..... | 152, 161-163 | iii |
| Kokagaming lake, STURGEON RIVER, | | | Experiments by, with nickel-steel. | 140, 141 | ii |
| NIP. | | | | | |
| Description of..... | 139 | viii | Gun works of, Essen. | | |
| Gold mining on and near..... | 237 | ii | molybdenum used in..... | 46 | xi |
| | 140 | viii | notes on..... | 176 | C xiv |
| <i>See also</i> Gold Cliff g. m. | | | ore for, from Africa..... | 110 | ii |
| Charleboagh g. m. | | | Steel tires for locomotives first | | |
| Rocks on and near..... | 93 | C xiv | made by..... | 387 | R C |
| argillites..... | 73 | i | Kudsir, HUNGARY. | | |
| arkose, petrography..... | 150 | B vii | Gasifying in, of wood, for iron | | |
| diabase, "..... | 149 | B vii | smelting..... | 484 | R C |
| Kokohama, INDIANA, U.S. | | | Kugler, George M. | 267 | viii |
| Natural gas in..... | 152 | R C | Kuhn, H. J. | | |
| Kokoko lake, NEAR TIMAGAMI LAKE, | | | Brick-making by, Crediton..... | 71 | B xv |
| NIP. | | | clay for, analysis... .. | 17 | B xv |
| Geological notes on..... | 172, 173 | x | Kukatouche river. <i>See</i> Ground-hog | | |
| Jaspilite near..... | 167, 172 | x | river. | | |
| assay..... | 180 | x | Kunz, George F. | | |
| coloured photo..... | Frontis. | x | Notes by, on corundum. | 215 | vii |
| Map of, sketch..... | 316 | xii | Methuen tp..... | 63 | vi |
| Rocks on and near..... | 174, 176 | x | diamond prospecting..... | 120 | ix |
| Kola pen., RUSSIAN LAPLAND | | | titanite..... | 211 | ix |
| Analysis of tinguaita from.. | 189, 190 | ix | Sapphire from Methuen tp., fav- | | |
| Kootenay dist., B. C. | | | ourably regarded by..... | 87 | xi |
| Hessite from..... | 106 | v | Kupfernickel. <i>See</i> Niccolite. | | |
| Kopparberg (LATE DALARNE), SWEDEN. | | | Kuski, John | 45, 48 | xii |
| Analysis of cancrinite-syenite | | | Kutjee, John | 45, 46, 50 | x |
| from..... | 173 | viii | Kwataboahegan river, MOOSE RIVER. | | |
| Koppel, L. | 104 | vii | Fossils from, paper by Parks. 180-191 | A xiii | |
| Korah tp., ALG. | | | shells..... | 143 | A xiii |
| Agricultural land in..... | 149 | viii | Lignite on..... | 168, 169 | A xiii |
| Gold and copper in..... | 60 | R C | Mouth of, description..... | 147 | A xiii |
| Koren, —? | 259 | viii | Notes on, by J. M. Bell..... | 137 | A xiii |
| | 164 | ix | Peat from, analysis..... | 175 | A xiii |
| Korkill, E. T. | | | Rocks on..... | 112, 143 | A xiii |
| Report by, as Inspector of Mines:— | | | Swamp at, source of..... | 146 | A xiii |
| 1904..... | 76-88 | A xiv | Timber on..... | 177 | A xiii |
| 1905..... | 47-107 | A xv | Kyanite. <i>See</i> Cyanite. | | |
| Koshkabogamog (KASHABOG) lake, | | | Kyle, M. | 49, 58 | ix |
| METHUEN TP., PETERBORO CO. | | | | 52 | x |
| Rocks on and near..... | 209-211, 214 | viii | Kylloven, Pete | 46 | x |
| nepheline-syenite..... | 193 | xi | Kyschtymit. <i>See</i> Anorthosite. | | |

| | Page. | Vol. | | Page. | Vol. |
|--|----------|-------|--|--------------|--------|
| L | | | Lac des Mille Lacs. — <i>con.</i> | | |
| Labelle, J. E. | | | Minor ref. to..... | 117 | v |
| Mining by, Michipicoten div.... | 104 | viii | Notes on, by Blue..... | 113-116, 135 | v |
| | 117 | ix | Road from, to Moss tp., built by | | |
| | 142 | x | Government..... | 121 | v |
| M. | 74 | xi | Rocks on and near, Huronian... | 158 | vii |
| La Belle lake, N. OF WITCH BAY, L. | 50 | xi | notes..... | 72 | vi |
| OF THE WOODS. | | | Storms on..... | 134 | v |
| Gold mining on. <i>See</i> Wendigo | | | notes by Palliser and Hind. | 119 | v |
| mine. | | | Surveys S. and S. W. of, by Cole- | | |
| steel mill, PITTSBURG. | | | man, ref. to..... | 3, 4 | v |
| Labour employed at, statistics... | 370 | R C | Lac du Bonnet, WINNIPEG RIVER, | | |
| La Berudine. <i>See</i> Berand, M. | | | MAN. | | |
| Laberge, Dr. | | | Boulder clay from, analysis..... | 92 | B XV |
| Experiments by, on moss-litter.. | 191 | vi | Lac la Plonge, MICHIPICOTEN DIV., | | |
| Laboratories, mining | | | ALG. | | |
| Germany and United States, | | | Greenstone on..... | 302 | A xiv |
| system of work in..... | 417, 418 | R C | Minor ref. to..... | 289 | A xiv |
| Kingston School of Mines, photo. | 192 | vi | la Pluie river. <i>See</i> Rainy river. | | |
| Labour. | | | Plat, NEAR LAKE OF THE | | |
| Bruce mines, trouble with.. | 175, 176 | ii | WOODS. <i>See</i> Shoal lake. | | |
| New Caledonia..... | 149 | ii | Poisson Gris, MICHIPICOTEN | | |
| Sudbury dist., statistics, 1892-1898. | 19 | viii | DIV., ALG. | | |
| Use of penitentiary, in iron mak- | | | Minor ref. to..... | 285, 293 | A xiv |
| ing..... | 16 | ii | Rocks on..... | 348 | A xiv |
| Wages paid for. <i>See</i> Wages. | | | Seul, ONT. AND KEE | | |
| Labrador pen. (Ungava). | | | Aluminium sulphate on (reported). | 180 | vii |
| Coal in..... | 126 | iv | Country from, to Wabigoon lake, | | |
| Jaspery ores in..... | 202, 204 | x | description..... | 53-55 | v |
| Mountains in, average altitude... | 193 | v | Description of, by Coleman..... | 60-62 | v |
| strike of..... | 10 | R C | Gold on, reported..... | 47, 61 | v |
| | 247 | v | Jasper pebbles on..... | 74 | v |
| Rocks of, anorthosite..... | 14 | R C | | 200 | x |
| Archæan..... | 7 | R C | Lacustrine deposit on, notes..... | 92 | v |
| | 245 | v | Length of..... | 49 | v |
| gneiss, effect of glacia- | | | Stratified sands of..... | 93 | v |
| tion on..... | 15 | R C | Surveys S. of, by Coleman, ref. to | 3 | v |
| Huronian..... | 17 | R C | Wild fruits of, blueberries..... | 85 | v |
| labradorite..... | 14 | R C | early ripening..... | 113 | vi |
| Laurentian, Low's | | | Tortue, RADNOR SEIG., CHAM- | | |
| views..... | 159 | vii | PLAIN CO., QUE. | | |
| tea. | | | Iron ore on..... | 26 | ii |
| Abitibi dist..... | 241, 250 | A xiv | Laccolite. | | |
| Mattagami valley..... | 150 | A xv | Definition of..... | 537 | R C |
| Labradorite. | | | Ont. and northern U. S. | 156-158 | vii |
| Definition of..... | 537 | R C | Laccolithic sills. | | |
| Exhibited at World's Fair..... | 188 | ii | L. Superior, conclusions by Law- | | |
| Hardness of..... | 202 | vi | son..... | 170, 171 | A xv |
| Labrador..... | 14 | R C | Lace bugs. <i>See</i> Bugs, lace | | |
| Lake Huron..... | 194 | ii | Lacey, Jonathan P. | | |
| Montreal, north of..... | 11 | R C | <i>See also</i> Smith and Lacey mica | | |
| Notes on and occurrences..... | 200 | ix | mine. | | |
| by Goodwin..... | 225 | vi | Notes by, 1891, on Sydenham | | |
| Specific gravity of..... | 202 | vi | mica mine..... | 244 | i |
| Labuan. | | | Lacloche islands, NORTH CHANNEL, | | |
| Royalties on minerals in..... | 43 | i | L. HURON. | | |
| Labyrinth bay, L. OF THE WOODS, | | | Rock of..... | 86 | i |
| R. R. D. | | | | 76 | B xiii |
| Gold mining on. <i>See</i> Sentinel | | | for glass-making..... | 94 | i |
| mine. | | | Huronian..... | 109 | R C |
| Lac au Cypres. <i>See</i> Pitch-pinelake. | | | limestone, for burning.... | 94 | i |
| Lac des Mille Lacs, Tn. B. D. | | | Trenton..... | 41 | R C |
| Country from, to Atikokan river, | | | lake, HARROW TP., ALG. | | |
| description..... | 72, 73 | v | Rocks on..... | 83 | i |
| Distances from, to neighbouring | | | | 30 | A xiii |
| lakes..... | 136 | v | mts., ALG. | | |
| Forest fires near..... | 96 | iv | Crystalline limestone in, mistaken | | |
| Glacial striae on..... | 89 | v | for quartz..... | 21 | B xiii |
| Gold near..... | 66 | R C | Iron ore in dist. of..... | 143 | R C |

| | Page. | Vol. | | Page. | Vol. |
|---|----------|---------|---|------------|--------|
| Lacloche mts., ALG.—Con. | | | La Fex, Frank. | 93 | vii |
| Minerals in, evidence before Roy. | | | copper mine. See <i>Hattie Bell</i> | | |
| Com. | 59, 60, | 109 R C | La Forest, Louis. | 269 | vi |
| Quartzites of. | 72 | i | Lafricain, S. | 113, 115 A | xiii |
| for glass-making. | 30 | B xiii | | 240 A | xiv |
| pt., NORTH CHANNEL, L. HURON. | 94 | i | Lafthi, Samuel | 28 | ix |
| Rocks north of. | 109 | R C | Lagier, John. | 236, 238 | v |
| Silver between, and Killarney. . | 60 | R C | <i>Lagopus lagopus.</i> See <i>Ptarmigan.</i> | | |
| Lacolle, LACOLLE TP., ST. JOHN CO., QUE. | | | Lahay bay, NOSHER BAY, MANITOU LAKE, R. R. D. | | |
| Peat at. | 198 | ii | Gold bearing dike on. | 123 | vii |
| Lacombe, A. | 74 | xi | Lahey, —? | 75, 87 | vi |
| La Course, —? | | | Laidlaw, Adam | | |
| Prospecting by, Anzhekumming lake. | 65, 66 | iv | Evidence by, before R. C. re:— | | |
| Lacroix river, MATAWIN RIVER, TH. B. D. | | | charcoal iron for castings. 330, | 401 | R C |
| Staurolite crystals on. | 210 | ix | free trade. | 234 | R C |
| <i>Lactuca hirsuta.</i> | | | Laing, A. T. | 58 | x |
| Mattagami valley. | 151 | A XV | W. F. | 56 | vii |
| Lacustrine clay. See <i>Clay, lacustrine deposits.</i> | | | Lainson, J. W. | | |
| Sudbury dist. | 105, 106 | C xiv | Brick making by, Carlton West. . | 107 | B XV |
| Western Ontario. | 90-93 | v | Laird, Robert | 60 | ix |
| Ladore pyrites mine, DALHOUSIE TP. | | | W. H. | | |
| Gossan from, analysis. | 186 | A xvi | Evidence by, before R. C. re:— | | |
| Limonite from, photo of laminated. 164 | | A xvi | free trade. | 235 | R C |
| Notes on, by Fraleck. | 163, 164 | A xvi | mining laws. | 312 | R C |
| Lady Evelyn lake, N. OF TIMAGAMI LAKE, NIP. | | | technical education. | 426 | R C |
| Cobalt near. | 56 | A xvi | Mining by, Michipicoten div. | 74 | xi |
| Copper on. | 24 | R C | See also <i>Laird iron claim.</i> | | |
| Galena on. | 198 | ix | and Henderson. | | |
| argentiferous. | 29 | R C | Waterpower plant of, at Sault Ste Marie. | 61 | x |
| Rocks on. | 72, 73 | i | iron claim, NEAR PUKASKWA RIVER, L. SUPERIOR. | | |
| Silver near. | 56 | A xvi | Minor refs to. | 316, 339 | A xiv |
| "Lady Head" s.s. (H.B.C.) | 191 | viii | Notes on, by J. M. Bell. | 334, 335 | A xiv |
| Lady Macdonald mine, SNIDER TP., ALG. | | | Lake, S. C. | 125 | x |
| Discovery of. | 169 | C xiv | Lakes. | | |
| Graphite in. | 284 | xii | Characteristic of Huronian and Laurentian systems. | 14 | R C |
| Notes on, 1892. | 249 | ii | Origin of. | 15 | R C |
| 1899. | 97 | ix | With double outlets. | 202 | v |
| 1900 (idle). | 122 | x | Lake Abitibi Gold Mfg. Co. | | |
| Rocks in and near. | 257, 258 | xii | Capital and date of charter. | 30 | A xvi |
| nickel-bearing eruptive. | 41 | C xiv | Champlain, N. Y. AND QUE. | | |
| norite. | 256 | xii | Iron mines of. | 349 | R C |
| Veins in, course of. | 249, 295 | xii | ores of. | 31 | ii |
| Lady Violet mine, SNIDER TP., ALG. | 104 | R C | Constance, SWITZERLAND, GERMANY AND AUSTRIA-HUNGARY. | | |
| Boring in, with diamond drill. . | 53 | x | Peat near, duration of formation. 183 | | i |
| Nickel-bearing eruptive in. | 142 | C xiv | Erie. | | |
| 40, 50, 111 | | C xiv | Chemung and Portage formation on. | 47 | R C |
| Norite in. | 249 | xii | Cincinnati anticline beneath. | 151 | R C |
| Lady's slipper. | | | Corniferous formation. | 46 | R C |
| Abitibi dist. | 241, 253 | A xiv | Devonian on, notes by Miller. | 25 | B xiii |
| Mattagami valley. | 150 | A xv | Erie clay on N. shore of. | 10 | B xv |
| thumb. | | | Gravel and sand on, for building. 12 | | iv |
| Night-hawk lake. | 123 | A xiii | Salt water in gas on (U. S.). | 154 | i |
| "Ladysmith" s. s. | 148 | xi | Girard system. | | |
| Lafargeville, JEFFERSON CO., N. Y. | | | Purchase by, of Martha apatite mine. | 194 | iii |
| Morainic hills near. | 242 | A xiii | Harold Gold Mines Co. | | |
| Lafayette college, EASTON, PA. | | | Capital and date of charter. | 7 | vi |
| Notes on, by Richards. | 510 | R C | | 10 | vii |
| | | | See also <i>Harold lake.</i> | | |

| | Page. | Vol. | | Page. | Vol. |
|------------------------------------|-----------|--------|--|----------------|-------|
| Lake Huron. | | | Lake of the Woods, R. R. D. | | |
| Altitude of | 151 | viii | Agricultural land between, and | | |
| Beaches on | 199 | A xv | Rainy lake | 207 | v |
| notes by Coleman | 176 | ix | Asbestos on | 195 | ix |
| Cobalt on | 1, 58, 61 | R xiv | Cactus on | 96 | iv |
| | 7 | A xvi | Copper (native) from | 105 | v |
| Copper on, azurite | 195 | ix | Description of, by Bigsby | 170 | v |
| bornite | 193 | ii | Fishing industry of, notes by Blue | 166 | v |
| early knowledge | 129 | ii | Galena on | 38 | iv |
| malachite | 202 | ix | Geological nomenclature of | 272, 273 | A xiv |
| mining | 92, 255 | R C | Geology of, compared to that of:— | | |
| See also Bruce mines. | | | Michipicoten div. | 205 | vii |
| Dean lake m. | | | Wanapitell dist. | 136, 137 | vii |
| Hermia m. | | | Glaciation on and near | 49 | R C |
| Massey Sta- | | | remnant of L. Agassiz | 91 | v |
| tion mine | | | Gold in, character of ores | 116 | R C |
| Superior m. | | | discovery | 122 | iv |
| Forest fires N. of, 1871 | 206 | v | galena in | 38 | iv |
| Geology of country N. of, paper | | | mispickel in | 38 | iv |
| by Bell | 63-94 | i | pyrrhotite n. | 37 | iv |
| Glaciation N. of, direction | 49 | R C | Gold mining on and near:— | | |
| Gold on | 114, 115 | R C | disputed titles | 206 | R C |
| Iron mining on | 123 | R C | evidence before R. C. | | |
| See also Wallace mines | | | 64, 65, 117-119 | | R C |
| Jasper pebbles on shores of | 184 | ix | future of industry, notes by | | |
| Lumber trade N. of | 119 | iv | Blue | 8, 9 | v |
| Mineral deposits on | 205 | R C | notes by Bell | 25, 26 | R C |
| Mining on, a pioneer's experience. | | | Coleman | 68-70 | iv |
| 171-178 | | ii | McKellar | 266 | v |
| Name "Huronian" derived from | 18 | R C | Merritt | 108, 109 | R C |
| Nickel ore on | 24 | R C | reports on operations:— | | |
| Quartz crystals on | 208 | ix | 1892 | 9, 232 | ii |
| Rocks north of | 109 | R C | 1893 | 13-34 | iii |
| Black River formation | 41 | R C | 1895 | 4, 168-188 | v |
| conglomerates | 9 | C xiv | 1896 | 7 Bull. | i |
| Devonian, notes by Miller | 25 | B xiii | 47-53, 90-104, 248-259 | | vi |
| diabase dikes | 76 | i | 1897 | 35-67, 112-121 | vii |
| feldspar, aventurine | 195 | ix | 1898, 41-44, 51-69, 276, 277 | | viii |
| labradorite | 194 | ii | 1899 | 36-52 | ix |
| Huronian | 70 | i | 1900 | 69-79, 90-93 | x |
| disturbed | 17 | R C | 1901 | 250-255 | xi |
| report by Coleman | 157-163 | viii | 1902 | 93-96 | xii |
| thickness | 195 | v | 1904 | 45-49 | A xiv |
| Onondaga formation | 45 | R C | 1905 | 47, 55-58 | A xv |
| quartzites | 20 | R C | 1906 | 60 | A xvi |
| for glass-making | 94 | i | Islands floating in, notes on | 109 | vi |
| sericite-schists | 209 | ix | Lignite on, reported | 125 | iv |
| trap | 15 | v | evidences of | 52 | R C |
| for street paving | 13 | v | Maps of, and of portions:— | | |
| Trenton formation | 41 | R C | Bigstone bay | 173 | v |
| Rutile on | 208 | ix | Rat Portage bay | 168 | v |
| Waterpower between, and L. | | | showing Laurentian and Huron- | | |
| Superior | 14 | B xv | ian formations | 12 | iii |
| Co. | | | Sultana island | 15 | iii |
| Capital and date of charter | 31 | A xvi | Mica in | 64 | R C |
| Exhibits of, at Pan-American | | | muscovite | 205 | ix |
| exhibition | 25 | A xv | Mispickel on | 38 | iv |
| Work by, at Bruce Mines | 94 | ix | Nickel on | 129 | ii |
| slope. | | | See also Keewatin n. m. | | |
| Notes on, by Burwash, geological | | | Ochre on | 64 | R C |
| and topographical | 169-172 | vi | Pine in district of | 119 | iv |
| Manitowick Gold Mg. and | | | Platinum on (reported) | 92 | i |
| Development Co. | | | Photos of camps, etc. on | 80, 81 | vi |
| Capital and date of charter | 9 | viii | Pyrrhotite on | 37 | iv |
| Medad Portland Cement Co. | | | Road in dist. of, built by Govt. ... | 9 | vi |
| Capital and date of charter | 10 | vii | Rocks on and near:— | | |
| of Bays, R. R. D. | | | carbonaceous shale | 104 | vi |
| Geology of, and vicinity | 167 | B vii | compared to those of Michi- | | |
| Soil around, character | 173 | B vii | picoten div. | 7, 11 Bull. | iii |
| Timber near | 181 | vii | | | |

| | Page. | Vol. |
|--|----------|--------|
| Lake of the Woods, R. R. D.—<i>Con.</i> | | |
| Rocks on and near.— <i>Con.</i> | | |
| Huronian..... | 18 | R C |
| ..... | 124 | iv |
| Keewatin..... | 160 | viii |
| views of Lawson..... | 186 | ix |
| petrography..... | 121-124 | vi |
| Route to, from Manitou lake, | | |
| notes on..... | 88-90 | vi |
| Shores of, indented, reason for..... | 203 | v |
| Storm on..... | 185 | v |
| Venetian red from..... | 64 | R C |
| of the Woods Gold and Silver Reduction Co. | | |
| Capital and date of charter..... | 10 | vii |
| History of, by Blue..... | 31-34 | iii |
| Notes on, 1892..... | 234, 235 | ii |
| Objects of..... | 53 | vi |
| Operating, 1898..... | 37 | vii |
| on the Mountain, PRINCE EDWARD CO. | | |
| Trenton limestone on..... | 99 | B xiii |
| Waterpower from..... | 240 | A xiii |
| Ontario. | | |
| Altitude of..... | 221 | x |
| Coast line of, formation of..... | 227 | x |
| Erie clay on..... | 10, 12 | B xv |
| Glaciation around:— | | |
| direction..... | 49 | R C |
| Iroquois beach..... | 230 | A xiii |
| Hudson River formation on..... | 43 | R C |
| Iron ore on..... | 43 | R C |
| Limestone on, fossiliferous..... | 89 | B xiii |
| Trenton..... | 41 | R C |
| Medina shale on, thickness..... | 43 | R C |
| Onondaga formation on..... | 117 | B xiii |
| Opinicon apatite mine, BEDFORD TP., FRONTENAC CO. | | |
| Notes on, 1892..... | 251 | ii |
| Opinicon Phosphate Co. | | |
| Capital and date of charter..... | 10 | vii |
| Orion Oil and Gas Co. | 116 | A xiv |
| Portland Cement Co. | | |
| Capital and date of charter..... | 9 | x |
| Notes on work by, 1902..... | 17 | B xiii |
| St. Clair, ONT. AND MICH. | | |
| Boundary line in, position of..... | 108 | v |
| Peat around..... | 191 | i |
| ..... | 198, 209 | ii |
| Shebandowan gold mine. | | |
| See Shebandowan lake. | | |
| Shore Natural Gas Co. | | |
| Capital and date of charter..... | 24 | A xiii |
| Superior. | | |
| Agates on..... | 192 | ix |
| Altitude of..... | 112 | vi |
| ..... | 151 | viii |
| Amethyst on..... | 193 | ii |
| Analcite on..... | 193 | ii |
| ..... | 193 | ix |
| Anthraxolite on..... | 193 | ii |
| Apophyllite and arragonite on..... | 193 | ii |
| ..... | 194 | ix |
| Barite on..... | 195 | ix |
| Basin of, notes on structure..... | 75-78 | iii |
| section (hypothetical)..... | 77 | iii |
| Canoe routes from, to various | | |
| places in Michipicoten div..... | 289-292 | A xiv |
| Chlorastrolite on..... | 196 | ix |

| | Page. | Vol. |
|--|---------------|--------|
| Lake Superior.—<i>Con.</i> | | |
| Copper on, azurite..... | 195 | ix |
| chalcopyrite..... | 196 | ix |
| chrysocolla..... | 196 | ix |
| cuprite..... | 197 | ix |
| malachite..... | 202 | ix |
| Copper mining on:— | | |
| early..... | 194, 255 | R C |
| historical notes..... | 92, 93 | R C |
| paper by Coleman..... | 120-174 | viii |
| Delessite on, in amygdaloids..... | 197 | ix |
| Description of, by D. Thompson..... | 62, 63 | iii |
| Effect of, on climate of north shore..... | 85 | v |
| Fish in, trout..... | 13 Bull. | iii |
| Fluorite in..... | 194 | ii |
| Geological nomenclature of, report by International Committee..... | 269-277 | A xiv |
| Geology of north shore..... | 129-138 | vi |
| Glaciation N. of, direction..... | 49 | R C |
| beaches..... | 136 | vi |
| ..... | 288 | A xiv |
| altitudes..... | 175, 176 | ix |
| notes by Coleman..... | 153 | viii |
| ..... | 175, 176 | ix |
| ..... | 193-199 | A xv |
| photos..... | 204, 205 | vii |
| moraines..... | 50 | R C |
| Gold in..... | 27, 114, 115 | R C |
| Iron in..... | 88 | i |
| character..... | 144 | R C |
| melanterite..... | 194 | ii |
| siderite..... | 194 | ii |
| ..... | 209 | ix |
| mining on. | | |
| depression in, 1891..... | 8 | i |
| notes by Blue..... | 65, 66 | ii |
| Macfarlane..... | 64 | ii |
| output, estimated..... | 21 | xii |
| 1888..... | xviii, 226 | R C |
| 1892..... | 126 | ii |
| exhaustibility of..... | 24 | xi |
| Iron sand on, attempt to mine..... | 73, 74 | A xiii |
| Laccolithic sills on..... | 256 | A xiv |
| notes by Lawson..... | 170 | A xv |
| Laumontite on..... | 201 | ix |
| Mineral pigments on, notes by Blue..... | 177 | i |
| Minerals on..... | 205 | R C |
| evidence before R. C. | 61-63 | R C |
| list of..... | 193, 194 | i |
| Mining on, a pioneer's experience..... | 171-178 | ii |
| ..... | 205 | ix |
| Natrolite on..... | 205 | ix |
| North shore of, photos..... | 173, 178, 179 | A xv |
| report by Coleman..... | 146-148 | viii |
| Prehnite in..... | 207 | ix |
| Rocks on, Cambrian..... | 169 | i |
| Huronian..... | 18 | R C |
| ..... | 70 | i |
| ..... | 348, 349 | A xiv |
| rep. by Coleman..... | 163-169 | viii |
| Keweenaw..... | 36, 67 | R C |
| Nipigon..... | 67 | R C |
| notes by Bell..... | 36-38 | R C |
| photos..... | 348-353 | A xiv |
| Potsdam..... | 40 | R C |

Lake Superior.— *Con.*Rocks on. — *Con.*

| | | |
|---|------------------|--------|
| syenites, paper by Coleman..... | 208-213 | xi |
| trap..... | 15 | v |
| Routes from, to northwest..... | 200 | v |
| Scenery on..... | 299 | A xiv |
| Silver in, discovery..... | 33 | R C |
| evidence before R. C. | 194-202 | R C |
| <i>See also Silver Islet m.</i> | | |
| Sylvanite on..... | 194 | ii |
| Thomsonite on..... | 210 | ix |
| Timber on tributaries of..... | 120 | iv |
| Waterpower between, and L. Huron..... | 14 | A xv |
| Zoolites in amygdaloids on..... | 212 | ix |
| Zinc blende in..... | 209 | ix |
| <i>See also Gessic and Zenith mines.</i> | | |
| Superior iron mine, Ishpeming, Mich. | | |
| Notes on, by Coleman..... | 152 | ix |
| Superior Mining Co. | | |
| Capital and date of charter..... | 10 | vii |
| Superior Mining div. | | |
| Creation of..... | 316 | R C |
| Superior (NATIVE) Copper Co. | | |
| Capital and date of charter..... | 10 | vii |
| Michipicoten mine acquired by..... | 103 | R C |
| Mining by, L. Superior..... | 102, 103 | R C |
| Superior Power Co. | | |
| Dock of, photos... 102, 103, 192, 193 | | x |
| Ferro-nickel process of..... | 222, 223 | ix |
| Financial difficulties of..... 6, 58, 87 | | A xiii |
| mines idle..... | 82 | A xiii |
| removed..... | 59 | A xiv |
| Map by, of Ont., for Pan-American Exhibition..... | 85-87, 90 | xi |
| Map by, of Michipicoten div..... | 175 | A xv |
| Road making by, 1900..... | 288 | A xiv |
| Stone and brick producing by..... | 28, 29 | xii |
| Waterpower utilized by..... | 14 | A xv |
| Work by, Michipicoten div..... | 35 | x |
| | 152 | xi |
| | 172 | A xv |
| Helen mine..... | 54, 137 | x |
| | 71, 265 | xi |
| | 38 | xii |
| | 70 | A xv |
| | 22 | A xvi |
| licence to..... | 66 | xii |
| Work by, Nipigon Lake dist..... | 24 | xi |
| | 105 | A xvi |
| Work by, Sault Ste. Marie..... | 61, 63 | x |
| canal making..... | 92 | xi |
| notes by Goodwin..... | 66, 67 | xi |
| plant, photo..... | 96, 97 | x |
| steel-mill of..... | 25 | xi |
| Work by, Sudbury dist..... | 99 | ix |
| | 20 | xi |
| | 15, 65, 143, 144 | C xiv |
| Creighton tp..... | 17, 19 | xii |
| Drury tp..... | 195 | A xiii |
| Elsie mine..... | 46, 249, 287 | xii |
| Gertrude mine..... | 36 | x |
| | 64 | xi |
| | 287 | xii |
| Levack tp..... | 197 | A xiii |

Lake Superior Silver and Gold Mill Reducing Works and Mg. Co.

| | | |
|---|-------------|--------|
| Capital and date of charter..... | 10 | vii |
| tp., HASTINGS CO. | | |
| Chalcantlite in..... | 196 | ix |
| Galena in..... | 198 | ix |
| <i>See also Katherine mine.</i> | | |
| Gold in..... | 28 | R C |
| prospecting..... | 92 | vii |
| Iron ore from, at World's Fair.... | 80 | ii |
| Mispickel in..... | 205 | ix |
| Old name of..... | 15 | ii |
| Tremolite in..... | 211 | ix |
| Zinc mining in. <i>See Katherine mine.</i> | | |
| Winnipeg, MAN. AND KEE. | | |
| Remnant of L. Agassiz..... | 9 | iv |
| Lakefield, DOUGLASS TP., PETERBOROUGH CO. | | |
| Cement works at..... | 32 | xi |
| <i>See also next refs.</i> | | |
| Portland Cement Co. | | |
| Analysis of clay and marl used by..... | 183 | A xiv |
| Cement of, report by Gillespie on value..... | 19 | A xv |
| Notes on, 1900..... | 17 | x |
| 1901..... | 32 | xi |
| 1902..... | 31, 35 | xii |
| 1905 and photos..... | 148, 149 | A xiv |
| Operating, 1903..... | 17 | A xiii |
| 1905..... | 17 | A xv |
| Lakeport, HALDIMAND TP., NORTH-UMBERLAND CO. | | |
| Gravel bar near..... | 239 | A xiii |
| Lakeside Gold Mine Co. | | |
| Capital and date of charter..... | 10 | vii |
| Lakeville, LITCHFIELD CO., U. S. | | |
| Blast furnace erected at, 1762.... | 342 | R C |
| Lalonde, F. | 142 | x |
| J..... | 141 | x |
| farm, NEAR COMBER, ESSEX CO. | | |
| Oil on..... | 158 | R C |
| L'Amable. <i>See</i> Detlor. | | |
| Lamarshe, Ernest | 25 | viii |
| La Mascotte gold mine, WHITEFISH BAY, L. OF THE WOODS. | | |
| Notes on..... | 43, 44, 112 | vii |
| | 73 | x |
| Lamb, Robert Ormston | | |
| Evidence, by, re royalties in Gt. Britain..... | 15 | i |
| Lambe, Lawrence M. | | |
| Determination by, of fossils from Port Colborne..... | 35 | xi |
| Lambert Island, LOON LAKE, TH. B. D. | | |
| Greywacké on..... | 255 | A xiv |
| mill, HIGHLAND CREEK, GRIFFITH TP., KENFREW CO. | | |
| Syenite at..... | 224 | viii |
| Lambs quarters, (WEED). | | |
| Night-hawk lake..... | 123 | A xiii |
| Lambton co. | | |
| Asphaltum in..... | 193 | ii |
| Brick-yards in, notes on..... | 74, 75 | B xv |
| Corniferous and Hamilton formations in..... | 25 | B xiii |
| Chemung and Portage formation in..... | 47 | R C |

| | Page. | Vol. | | Page. | Vol. |
|--|----------|--------|--|------------|--------|
| Lambton co.—<i>Can.</i> | | | Lancaster (BRONSON) farm, DUN- | | |
| Limestone in, notes by Miller... | 68 | B xiii | GANNON TP., HASTINGS CO. | | |
| Oil in, notes by Blue... | 178 | i | Beaches on... | 177 | ix |
| industry, 1903... | 23, 24 | A xiii | Nepheline on, notes by Coleman... | 252 | viii |
| report by Corkill... | 111, 112 | A xiv | Photo of falls near... | 232, 233 | viii |
| wells, number... | 89 | A xiv | tp., GLENGARRY CO. | | |
| Salina formation in, thickness... | 98 | A xiv | Califerous formation in. <i>See</i> | | |
| Salt works in, number, 1897... | 24 | vii | Glennewis. | | |
| 1898... | 17 | viii | Lancy oil well, PETROLEA. | | |
| mills, YORK TP., YORK CO. | | | Method of drilling... | 161 | R C |
| Iroquois beach at... | 229 | A xiii | Production of... | 24 | vi |
| Lamellibranchiata. | | | Land, —? | | |
| Abitibi river... | 188 | viii | Nickel-plating by... | 159 | ii |
| Anderdon tp... | 125 | xi | John | | |
| Kwataboahagan river, notes by | | | Mica claim of, Ferguson tp... | 280 | v |
| Parks... | 188 | A xiii | and Immigration Co. | | |
| St. Marys, near... | 96 | B xiii | Prospecting by, Haliburton co... | 47 | xi |
| Lamont. <i>See</i> Widdifield. | | | plaster. | | |
| Lamorandiere bay, RUTHERFORD | | | <i>See also</i> Gypsum. | | |
| TP., ALG. | | | Definition of... | 21 | A xiii |
| Rocks on and near... | 83 | i | Landers, Thomas | | |
| crystalline schists... | 80 | i | Brick-making by, Hamilton... | 106 | B xv |
| limestone, analysis... | 31 | B xiii | Landon, —? | 75, 86, 87 | vi |
| for burning... | 94 | i | Lands, mining. <i>See</i> Mining lands. | | |
| notes by Bell... | 30 | B xiii | Lands Corporation of Michipicoten. | 105 | viii |
| ornamental stone... | 93 | i | | 117 | ix |
| Lamp portage, DOG RIVER, L. SUPERIOR. | | | Landslides. | | |
| Strike at, direction... | 178 | ix | Blanche River basin, L. Timiskaming... | 215 | xi |
| Lamplugh, George William. | 144 | vii | Moose River basin... | 147 | A xiii |
| Lampshire, Harry. | 28 | ix | Lane, A. C. | | |
| Lamson, John. | 276 | vi | Report by (and others) on Pre-Cambrian nomenclature... | 269-277 | A xiv |
| William | 276 | vi | Lang, John L. | 184 | A xiv |
| Lanark, LANARK TP., LANARK CO. | | | Langdon, James. | 58 | xii |
| Limestone from, analysis... | 70 | B xiii | | 86 | A xiii |
| Oligoclase in... | 194 | ii | John G. | | |
| co. | | | Director, Hamilton Steel and Iron | | |
| Apatite mining in, early... | 436 | R C | Co... | 29 | iv |
| Brick making in, notes on... | 75, 76 | B xv | Work by, at Port Henry, N. Y... | 330 | xii |
| Corundum in... | 205, 225 | viii | N. M. | 341 | xii |
| Iron ores of, character... | 392 | R C | Lange, Jenson & Co. | | |
| notes by Birkinbine... | 323, 324 | R C | Stove of, for burning peat, description... | 227 | xii |
| Limestone in, notes by Miller... | 70 | B xiii | Langer, Dr. Carl | | |
| Mineral pigments in... | 177 | i | Photo of... | 209 | xii |
| Paleozoic rocks in... | 22 | B xiii | Nickel extraction process of. <i>See</i> | | |
| Potsdam... | 40 | R C | Ludwig. | | |
| Topography of, character... | 437 | R C | Langevin, Rev. L. P. A. | | |
| County Peat Fuel Co. | 9 | x | History by, of Fort Frances... | 162 | v |
| | 204 | xii | Langford, Henry | | |
| tp., LANARK CO. | | | District Crown Attorney, Kenora... | 67 | vi |
| Calcite in... | 193 | ii | Gold mining by, L. of the Woods... | 52 | x |
| Limestone in... | 102 | B xiii | Langley, William A. | 156 | vi |
| analysis... | 70, 71 | B xiii | Langrill, A. S. | 162 | A xiv |
| Lancashire, ENGLAND. | | | Langshytta, SWEDEN. | | |
| Iron industry of, Spanish ore | | | Iron ores of... | 479 | R C |
| used in... | 121 | ii | <i>Lanius borealis. <i>See</i> Shrike, north-</i> | | |
| ore in, royalty on... | 22 | i | <i>ern</i> | | |
| Lancaster farm, DUNGANNON TP. | | | Lansdowne, LANSDOWNE TP., LEEDS | | |
| See Bronson. | | | CO. | | |
| Gap, PENN. | | | Clay plain near... | 241 | A xiii |
| Nickel mine at... | 213 | ix | tp., LEEDS CO. | | |
| | 149 | C xiv | Barite in... | 195 | ix |
| exhaustion... | 28 | vii | Celestite in... | 196 | ix |
| method of treatment... | 404 | R C | Galena in... | 198 | ix |
| output... | 182 | iv | Iron furnace in. <i>See</i> Lyndhurst. | | |
| pyrrhotite in, analysis... | 163 | ii | Lantin, Patrick. | 49, 57 | xi |
| shut down, 1891... | 131 | ii | Lanz & Son, M. | 120 | ii |

| | Page. | Vol. | | Page. | Vol. |
|---|------------|--------|---|---------|--------|
| Lapis lazuli. <i>See</i> Lazurite. | | | La Rose silver mine.—Con. | | |
| Lapland. | | | Position of..... | 7 | A XV |
| Peat in..... | 219 | ii | Pyrargyrite crystals from, diagram..... | 14 | B XIV |
| Larch. <i>See</i> Tamarack. | | | Rocks at and near:— | | |
| saw-fly. <i>See</i> Saw-fly, larch | | | breccia, analysis..... | 48 | B XIV |
| Larchwood, BALFOUR TP., ALG. | | | diabase and slate..... | 27, 49 | B XIV |
| Agricultural land near..... | 105, 106 | C XIV | | 52 | A XVI |
| Minor ref. to..... | 198 | A XIII | Specimens from, for Louisiana | | |
| Rapids at..... | 207 | A XIII | Exhibition..... | 17, 18 | F XIV |
| Sandstone at and near..... | 86 | i | Vein (main) in, dike-like..... | 37 | B XIV |
| notes by Coleman..... | 10, 97-100 | C XIV | photo..... | 60 | B XIV |
| photo..... | 99 | C XIV | strike..... | 36 | B XIV |
| quarried..... | 93 | i | White bloom in..... | 18 | B XIV |
| Slate near..... | 5 | C XIV | <i>See also</i> Appendix to this Index. | | |
| Larder city, LARDER LAKE, NIP. | | | Mining Co. | 13 | A XVI |
| Fault north of..... | 214 | A XVI | Larson, D. A. | 72 | viii |
| Rocks at and near..... | 208, 215 | A XVI | Gus | | |
| Mining recorder's office at..... | 36 | A XVI | Gold mining by, Van Horne tp..... | 244 | xi |
| (PRESENT) lake, NIP. | | | Manager, Redeemer mine..... | 66 | A XIII |
| Description and geology of, by | | | Larue, —? | | |
| Miller..... | 219, 220 | xi | Pioneer of Radnor Forges furnace..... | 24 | ii |
| Gold on, discovery..... | 6, 55, 219 | A XVI | La Rue, W. G. | 273 | viii |
| Perch in..... | 221 | xi | | 71 | ix |
| Report on and vicinity (with | | | <i>Larus argentatus smithsonianus.</i> <i>See</i> | | |
| map) by Brock..... | 202-218 | A XVI | Gull, American Herring | | |
| ref. to..... | 2 | A XVI | " <i>atricilla.</i> <i>See</i> Gull, black | | |
| Rocks on and near:— | | | headed | | |
| dolomite..... | 221 | A XVI | Lash, Miller. | 133 | A XIV |
| notes and photos..... | 204-216 | A XVI | tp., R. R. D..... | 167 | v |
| petrographical..... | 229 | xi | L'Assomption river, St. LAWRENCE | | |
| Lake Gold Mg. Co. | | | RIVER, QUE. | | |
| Capital and date of charter..... | 28 | A XVI | Cobalt and nickel on..... | 443 | R C |
| Lake Mines. <i>See</i> Reddick | | | Last, Arthur | 104 | A XV |
| gold claims. | | | Chance gold mine, MATAGAM- | | |
| Lake Mg. div. | | | ASING LAKE, WANAPITEI L. | | |
| Creation of..... | 36 | A XVI | DIST., NIP. | | |
| Description of..... | 45 | A XVI | Notes on, 1896..... | 269 | vi |
| Lardintown, BUTLER CO., PENN. | | | 1897..... | 87, 140 | vii |
| Anticline at..... | 148 | i | pt., L. OF THE WOODS, R.R.D. | | |
| Lardner, W. P. | | | Gneiss at..... | 102 | vi |
| Barytes claim of, McKellar island..... | 276 | v | Latchford, COLEMAN TP., NIP. | | |
| La Reine Gold Mg. Co. | | | Mining class at..... | 53 | A XVI |
| Capital and date of charter..... | 10 | vii | recorder's office at..... | 36 | A XVI |
| <i>Larix laricina.</i> <i>See</i> Tamarack. | | | Slates near..... | 47 | B XIV |
| Larkins, J. P. | 234 | ii | Water-courses near..... | 35, 36 | B XIV |
| Larmond (or L'ARMOUR), Peter. 47, 48 | xii | | Silver Mg. Co. | | |
| Larnach, Hon. W. J. M. | 513 | B C | Capital and date of charter..... | 28 | A XVI |
| La Rose, Frederick | | | <i>Lathyrus maritimus.</i> <i>See</i> Pea, wild | | |
| Discoverer of La Rose silver mine..... | 7 | A XVI | " <i>ochroleucus.</i> | | |
| Joseph | | | Mattagami valley..... | 150 | A XV |
| Discoverer of Last Chance silver | | | " <i>palustris.</i> | | |
| mine..... | 269 | vi | Mattagami valley..... | 150 | A XV |
| silver mine, COBALT, NIP. | | | Latimer, J. F. | | |
| Boring in, with Govt. drill..... | 27, 28 | A XV | Evidence by, before R.C. re:— | | |
| Chloanthite from, analysis..... | 19 | B XIV | gold mining, L. of the Woods..... | 116 | R C |
| Cobalt bloom in..... | 18 | B XIV | prospector's rights..... | 316 | R C |
| Discovery of..... | 7 | A XVI | Latour, Eli | 26 | A XIV |
| Dyscrasite from..... | 23 | B XIV | Laughlin, Alexander | 17 | A XVI |
| Minor ref. to..... | 15 | B XIV | Laughton, M. | 117 | ix |
| Notes on, 1905..... | 73, 74 | A XV | Laumontite. | | |
| Nicolite from, analysis..... | 19 | B XIV | Associated with copper..... | 192 | ii |
| Ore of, percentage of nickel in..... | 25 | B XIV | Lake Superior amygdaloids..... | 201 | ix |
| Owners of..... | 5 | A XIV | Lauray, Jacob | 54-57 | xi |
| Photos of..... | 50, 52 | B XIV | | | |
| cobbing and sacking..... | 56 | B XIV | | | |
| vein..... | 60 | B XIV | | | |
| underground..... | 55 | B XIV | | | |

| | Page. | Vol. | | Page. | Vol. |
|---------------------------------------|----------|--------|--|------------|--------|
| Laurentian. | | | Laurentian gold mine, NEAR GOLD | | |
| Apatite in, notes by Penrose..... | 437 | R C | Rock, MANITOU LAKE, R.R.D. | | |
| origin..... | 443 | R C | Minor ref. to..... | 1 | A xiv |
| Distribution and character, notes | | | Notes on, 1904..... | 42, 52 | A xiv |
| by Bell..... | 7-13 | R C | 1905 and photos..... | 50, 51 | A xv |
| Logan's views on..... | 244 | V | by Belyea..... | 43, 57, 58 | A xvi |
| Named by Logan..... | 4 | R C | Producing, 1906..... | 6 | A xvi |
| Notes on, by Bell and Shaler..... | 169 | I | rich ore, 1905..... | 4, 47 | A xv |
| Logan, Adams and | | | Mg. Co. | | |
| Van Hise..... | 194 | V | Capital and date of charter..... | 5 | xii |
| Origin of..... | 13-16 | R C | Work by, 1904..... | 52 | A xiv |
| Paper on, by Bell..... | 6-10 | R C | Stone Co. | | |
| 245-249..... | V | | Capital and date of charter..... | 11 | xi |
| Petrographical notes on..... | 154-156 | vii | Laurentide Mica Co. | | |
| Quebec, north of Ottawa river, | | | Factories of, notes on..... | 90, 91 | A xvi |
| thickness..... | 168 | i | Mica trimming works of, Ottawa..... | 86 | A xiv |
| Relationship of, with Huronian..... | 94 | V | 105 | A xv | |
| 209..... | vii | | Laurie, --? | 57 | i |
| Restricted use of the term..... | vii | B xiii | Laurin, Joseph | 27 | ix |
| <hr/> | | | | | |
| Algoma dist.:- | | | Laurvik, NORWAY. | | |
| Abitibi river, contact with Hur- | | | Analysis of laurvikite from..... | 211 | xi |
| onian..... | 193 | viii | Laurvikite. | | |
| Frederick House river, contact | | | Byskoven, Norway, analysis..... | 211 | xi |
| with Huronian..... | 178 | viii | Lauzon, A. See Lawlor and Lauzon. | | |
| L. Huron, N. of, notes by Cole- | | | Lavaltrie tp., BERTHIER CO., QUE. | | |
| man..... | 163 | viii | Peat in..... | 198 | ii |
| Michipicoten div., contact with | | | Lavanburgh, Fred L. | 122 | xi |
| Huronian..... | 188 | vii | Lavant, LAVANT TP., LANARK CO. | | |
| 140, 146..... | viii | | Mica-schist between, and Flower. | 101 | B xiii |
| 151..... | xi | | iron mine. See Wilbur iron | | |
| notes by Willmott..... | 7 Bull. | iii | mine. | | |
| paper by Bell..... | 63-94 | i | Mining Co. | | |
| Sudbury dist., character, 2, 4, 9, 10 | c | xiv | Capital and date of charter..... | 10 | vii |
| Copper Cliff, contact with | | | tp., LANARK CO. | | |
| Huronian..... | 145 | vii | Barite in..... | 195 | ix |
| Boston tp..... | 262 | A xiv | Chalcopyrite in..... | 196 | ix |
| Cobalt dist., contact with Keewa- | | | Gold in..... | 199 | ix |
| tin..... | 45, 46 | B xiv | 204..... | xi | |
| description..... | 40 | B xiv | Iron ore in..... | 137 | R C |
| Hastings co., corundum in..... | 210 | vii | character..... | 392 | R C |
| Lac des Mille Lacs..... | 72 | vi | exhibited at World's Fair..... | 78-81 | ii |
| Lake Superior, contact with Hur- | | | magnetite..... | 202 | ix |
| onian, photo..... | 349 | A xiv | quality..... | 191 | ii |
| Larder Lake dist..... | 203, 206 | A xvi | mining..... | 59 | ii |
| notes by Brock..... | 210 | A xvi | evidence before R. C..... | 140, 141 | R C |
| Otto tp., contact with Huronian..... | 178 | xii | notes by Morris..... | 137 | R C |
| Rainy River dist.:- | | | <i>See also Caldwell m.</i> | | |
| L. of the Woods, contact with | | | Willbur m. | | |
| Huronian..... | 25 | iii | Marl in..... | 122 | A xiv |
| 100, 102..... | vi | | analysis..... | 71, 72 | B xiii |
| 110, 111, 115, 119, 146..... | vii | | Mica in..... | 203 | ix |
| map showing..... | 12 | iii | Lavas. | | |
| Little Turtle lake, contact with | | | Sudbury dist., notes by Coleman. | | |
| Huronian..... | 129 | vii | 118-120 | C xiv | |
| Manitou lake..... | 84 | vi | Lavase lake, NEAR PANACHE LAKE. | | |
| notes by Coleman..... | 114-123 | vi | Alg. | | |
| Rainy Lake region:- | | | Limestone near, description..... | 29 | B xiii |
| barrenness of..... | 52 | iv | Lavin, --? | 157 | v |
| distribution..... | 47-50 | iv | Lavoisier, Antoine Laurent | | |
| petrography..... | 77-81 | iv | Aluminium discovered by..... | 173 | i |
| Sawbill lake, gold in..... | 4 Bull. | i | Law, S. | 104 | xiii |
| Seine River dist..... | 77 | v | 117..... | ix | |
| Renfrew co., corundum in..... | 210 | vi | William S. | 61 | i |
| Sundridge..... | 54 | | Lawlor, J. H. See next ref. | | |
| Timagami Lake region..... | 56, 57 | R C | | | |
| 162, 163..... | x | | | | |

| | Page. | Vol. | | Page. | Vol. |
|--|-------------------|--------|---|----------|--------|
| Lawlor and Lauzon. | | | Lawson, L. | | |
| Gold mining by, Michipicoten div. | 194 | vii | Gold mining by, Aubrey tp. | 95 | x |
| | 104 | viii | William | | |
| | 117 | ix | Analysis by, of rocks, Seine River dist. | 100 | v |
| | 142 | x | Assay by, of titaniferous ores. | 231 | vii |
| | 74 | xi | Examination by, of anorthosites, S. Sherbrooke tp. | 226 | viii |
| | 66 | xii | Cobalt Silver Mg. Co. | | |
| | 48 | A xiii | Capital and date of charter. | 30 | A xvi |
| Lawray, Jacob | 57 | xi | silver mine, COBALT, NIP. | | |
| Lawrence, ? | | | Position of. | 7 | A xv |
| Analysis of clay from brick-yard of, Tweed. | 17 | B xv | Shipping, 1905. | 15 | B xiv |
| Leonard, J. | | | Work at, 1905. | 84 | A xv |
| Zinc mining by, near Chelmsford. | 33 | viii | Lawyers (FISH). | | |
| Lawrence, ESSEX CO., MASS. | | | Lake of the Woods. | 97, 98 | vii |
| Waterpower at. | 485 | R C | Laxton tp., VICTORIA CO. | | |
| Lawrila, Jacob | 55, 57 | xi | Molybdenite mining in. | 23 | xii |
| Lawson, Andrew C. | | | Layard—? | 165 | i |
| Accuracy of surveys by. | 41 | iv | Laycock, W. A. | 38, 112 | vii |
| Advice by, to prospectors, Rainy Lake reg. | 52, 53 | iv | Layle, D. | 104 | vii |
| Analysis by, of hessite from L. of the Woods. | 105 | v | Lazurite (LAPIS-LAZULI). | | |
| Calorific power of anthraxolite determined by. | 165 | vi | Description and use of. | 229 | vi |
| Geological nomenclature by. | 19 | R C | Leach island, L. SUPERIOR, ALG. | | |
| Kettle-holes mentioned by, N. shore of L. Superior. | 112 | vi | Notes on, by Coleman. | 131 | viii |
| Map by, of Rainy lake, ref. to. 83, 88 | | vi | lake, MICHIPICOTEN DIV. | | |
| Notes by, on Pine Portage g. m. 26, 27 | | iii | Faults north of. | 311 | A xiv |
| References to surveys by, in:— | | | Iron ore on and near. | 315 | A xiv |
| L. of the Woods dist. | 17 | R C | notes by J. M. Bell. 330, 331 | | A xiv |
| | 14 | iii | Rocks on and near. | 348 | A xiv |
| | 44, 69 | iv | Doré formation. | 344 | A xiv |
| | 101 | vi | Troughs near. | 339 | A xiv |
| | 115, 151-160, 209 | vii | Lead (GALENA). | | |
| North shore of L. Superior. | 136 | vi | Apatite dists. | 442 | R C |
| | 204 | vii | Canada, production, 1887. | 213 | R C |
| | 175 | ix | 1888. | 525 | R C |
| | 150-156 | viii | Distribution of. | 198 | ix |
| | 198 | A xv | notes by Blue. | 175 | i |
| Pigeon River dist. | 147, 148 | ix | Gt. Britain, England. | 173 | i |
| Rainy Lake dist. | 4, 77-92 | iv | royalties. | 15 | i |
| | 49, 56, 91 | v | Industry of, 1898. | 32 | viii |
| | 114 | vi | Mines of, 1905, notes. | 91 | A xv |
| | 151-160 | vii | 1906, " | 78 | A xvi |
| | 124, 184 | ix | Ores of, notes by Goodinan. 208, 209 | | vi |
| Section by, of Mt. McKay. | 39 | B xiv | Production, 1904. | 1, 3, 15 | A xiv |
| Views of, regarding:— | | | 1905. | 1-3, 16 | A xv |
| Keewatin series, L. of the Woods. | 186 | ix | 1906. | 3-6, 18 | A xvi |
| Rainy Lake dist. | 153 | vii | Prospecting for, hints on. | 460, 461 | R C |
| Laccolithie sills of L. Superior. | 170, 171 | A xv | Test for. | 449 | R C |
| Lacustrine deposit, Wabigoon lake. | 92 | v | United States:— | | |
| Trap dikes N. of L. Superior. | 134, 135 | vi | Leadville. | 202 | R C |
| | | | Mine La Motte. | 71 | B xiv |
| H. E. | | | | 146 | C xiv |
| Work by, for Crescent G. M. Co. 263 | | v | production, 1887. | 213 | R C |
| <i>See also</i> Lawson silver mine. | | | 1888. | 525 | R C |
| John | | | | | |
| Acknowledgments to. | 43 | C xiv | Blanche River region. | 25 | B xiv |
| Work by, for Canadian Copper Co. 123 | | x | Kenogami lake. | 177 | xii |
| | 64 | xi | Marshy lake, near. | 224 | xi |
| | 117, 260 | xii | Caribou lake, Alg., argentiferous. | 70 | A xv |
| | 1, 140 | C xiv | Carleton Place. | 145, 146 | R C |
| | 63 | A xv | Clinton tp., attempt to mine. | 73 | B xiii |
| | 63 | A xvi | Frontenac co., Barrie tp. | 203 | xi |
| | | | Loughborough tp. | 145, 146 | R C |
| | | | Palmerston tp. | 219 | v |
| | | | Hastings co. | 30 | R C |

| | Page. | Vol. | | Page. | Vol. |
|---|------------|--------|--|--------------------|-------|
| Lead.—<i>Con.</i> | | | Leadville, LAKE CO., COL. | | |
| Hastings co. = <i>Con.</i> | | | Galena in silver veins at..... | 202 | R C |
| Hollandia mine..... | 15 | A xiv | Mining Co. | | |
| See also Hollandia m. | | | Capital and date of charter..... | 9 | viii |
| Katherine m. | | | Leafield, CARDIFF TP., HALIBURTON CO. | | |
| Jackfish lake, Th. B. d..... | 76, 77 | v | Corundum near..... | 216 | viii |
| Lake of the Woods..... | 20 | iii | Leamington, MERSEB. TP., ESSEX CO. | | |
| K 157 island..... | 104 | vi | Brickyard at, notes on..... | 64 | B xv |
| Mikado mine..... | 106 | vi | Corniferous formation at, thick- | | |
| Lake Superior and Port Arthur | | | ness..... | 47 | R C |
| dist..... | 61-63 | R C | Natural gas in and near..... | 20, 21, 114 | A xiv |
| Black bay..... | 10, 36, 37 | R C | price..... | 23 | A xv |
| | 87 | A xiii | revenue..... | 19 | vii |
| Dorion tp..... | 37 | R C | supply..... | 29 | v |
| | 59 | A xiii | | 42-44 | xi |
| Goulais river..... | 60, 203 | R C | | 39 | xii |
| Jackfish bay..... | 26 | R C | | 91 | A xiv |
| | 86 | x | | 25 | A xvi |
| Kaministikwia..... | 194 | ii | use of, notes... 25, 26 | | vi |
| Silver islet..... | 86 | v | Oil near. See Leamington oil- | | |
| | 139 | vi | field. | | |
| Silver lake..... | 170 | A xv | Petition made by, re export of | | |
| silver mines..... | 146 | R C | gas to Detroit..... | 41 | xi |
| | 54-58 | B xiv | Trenton formation at..... | 113 | A xv |
| argentiferous..... | 191 | ii | Water from, analysis..... | 58 | i |
| Silver Creek m..... | 203 | R C | Comber Oil Co. | | |
| Three A m..... | 28 | R C | Capital and date of charter..... | 26 | A xv |
| Wolf river..... | 38 | R C | Oil Co. | | |
| | 15 | A xiv | Borings by..... | 116 | A xiv |
| Larder Lake dist..... | 214, 215 | A xvi | Capital and date of charter..... | 25 | A xiv |
| Sault Ste. Marie region..... | 205 | R C | Leamington supplied by, with gas. | 25 | A xvi |
| Echo lake..... | 147 | R C | Work by, 1905..... | 22 | A xv |
| evidence before R. C..... | 59, 60 | R C | 1906..... | 96 | A xvi |
| Garden river..... | 147, 203 | R C | oil-field, ESSEX CO. | | |
| notes by Bell..... | 29 | R C | Oil in..... | 20, 21, 89 | A xiv |
| Sudbury deposits..... | 29 | R C | boring for..... | 25 | v |
| | 91, 92 | i | | 21, 112, 114 | A xv |
| | 282 | xii | | 115, 116 | A xiv |
| | 95, 161 | C xiv | notes by Corkill..... | 90 | A xiv |
| associated with iron..... | 59 | R C | production, 1905..... | 108 | A xv |
| Drury tp..... | 203 | R C | 1906..... | 24 | A xvi |
| Graham tp..... | 106, 425 | R C | Work in, by Acme Oil Co..... | 92 | A xvi |
| Fairbank tp..... | 105 | R C | Leamy lake, NEAR HULL, QUE. | | |
| Moneriff tp..... | 106 | R C | Cement works on..... | 146 | A xiv |
| Straight lake..... | 106 | R C | Leap Year Consolidated Gold Mfg. | | |
| Timagami Lake region..... | 56, 58 | R C | Co. | | |
| Cross lake, argentiferous..... | 180 | x | Capital and date of charter..... | 10 | vii |
| | 101 | A xiii | Learned, Edward | | |
| | 24 | B xiv | Interested in Silver Islet mine.. | 195 | R C |
| Lady Evelyn lake..... | 24 | B xiv | | 141, 152, 155, 156 | vi |
| Timiskaming lake: | | | Leavenworth, LEAVENWORTH CO., | | |
| Baie des Peres..... | 180 | x | KAN. | | |
| Wright's silver mine..... | 101 | A xiii | Paving clay from, analysis..... | 120 | iii |
| | 24 | B xiv | Leavitt, T. H. | | |
| | 7 | A xvi | Peat drying process of, notes.... | 197 | i |
| Trout lake. Bennett tp..... | 201 | A xiii | Notes by, on peat for locomotives. | 203, 204 | i |
| | 71 | C xiv | Leckie, Major Robert G. | | |
| arsenate. | | | Arsenic mining by, near Tima- | | |
| Composition and use of..... | 113 | xi | gami..... | 73 | A xiv |
| carbonate. See Cerussite. | | | | 23, 88 | A xv |
| molybdate. See Wulfenite. | | | Director, Massey Station Mfg. Co. | 267 | xi |
| pencils. | | | Iron pyrites mining by, James | | |
| Works for, Stein, Bavaria..... | 37 | vi | lake..... | 20 | A xv |
| vitriol. See Anglesite. | | | Part owner, Creighton mine.... | 99 | ix |
| Leadhills, LANARK CO., SCOTLAND. | | | Massey Copper m..... | 120 | x |
| Gold mining near..... | 92, 115 | R C | Statement by, re proposed smelter, | | |
| mine, McTAVISH TP. See Enter- | | | Georgian bay..... | 261 | ix |
| prise mine. | | | | | |

| | Page. | Vol. | | Page. | Vol. |
|--|---------------|------|---|----------|------|
| LeClair, E. T. | | | Ledyard iron mine. —Con. | | |
| President, Boulder Gold Mfg. Co. | 61 | viii | Notes on, 1891..... | 236, 237 | i |
| LeCresot, SAÔNE-ET-LOIRE, FRANCE. | | | by Ledyard (and analysis)..... | 59, 60 | ii |
| Foundry at, notes on..... | 176 c | xiv | Ore from, at World's Fair..... | 80 | ii |
| molybdenum used in..... | 46 | xi | tests on..... | 78 A | xiv |
| Leda arctica. | | | Lee ? | | |
| Ottawa (near)..... | 216 | x | Attempt by, to mine lead, Clinton tp..... | 73 B | xiii |
| " (<i>Portlandia</i>) <i>arctica</i> . | 32 B | xv | Frederick. | 52, | xi |
| Ottawa..... | 224 | x | Harry A. | | |
| " <i>pygmaea</i> . | | | Paper by, on use and abuse of dynamite..... | 284-287 | v |
| Greens creek, near Ottawa..... | 221 | x | Joseph. | 204 | iv |
| Leda clay. | | | Blain station, Port ARTHUR-DULUTH RY., TH. B. D. | | |
| Analyses, notes and photos.... | 31-33 B | xv | Gold mining near..... | 231 | iv |
| Armiprior, for bricks..... | 96 B | xv | =mills iron mine, EASTERN ONT. | 86 | xi |
| Carleton Place, for bricks..... | 75 B | xv | Leeches. | | |
| Casselman, "..... | 97, 98 B | xv | Abitibi dist..... | 127 A | xiii |
| Economic uses of..... | 227 | x | Lac des Mille Lacs..... | 135 | v |
| Ottawa dist., for bricks..... | 215 | x | Leechman, John | | |
| Billings Bridge..... | 61 B | xv | Mill superintendent, Regina mine. | 253, 255 | vi |
| Lederite. See Titanite. | 60 B | xv | Notes by, on Regina mine..... | 92 | vi |
| Ledoux, Dr. A. R. | | | Leede, Julius. See Leede furnace. | | |
| Analysis by, of iron ore, Belmont tp..... | 60 | ii | Adopted at Gold Hill mine..... | 232, 235 | ii |
| Assays by, of silver ores, Cobalt. | 12 A | xvi | Description of..... | 24 | iii |
| Ledum. | | | Leeds co. | | |
| On peat bogs..... | 139 | iii | Apatite mining in, early..... | 436 | R C |
| " <i>latifolium.</i> See Labrador tea. | 213 | ii | Brick-yards in, notes on..... | 76, 77 B | xv |
| Ledyard, E. D. | 234 | iv | Chondrodite in..... | 193 | ii |
| Thomas D. | | | Paleozoic rocks in..... | 22 B | xiii |
| Belmont iron mine owned by.... | 59 | ii | Potsdam..... | 40 | R C |
| 47 | iii | | Topography of, character..... | 437 | R C |
| See also Ledyard iron m. | | | tp., LEEDS CO. | | |
| Estimate by, of cost of working iron ore in Ont..... | 354 | R C | Dikes in, containing nickel..... | 220 | v |
| 103 | ii | | See also Seely Bay. | | |
| Evidence by, before R. C. re:— | | | Serpentine mining in..... | 297 | xi |
| free trade..... | 234 | R C | 13 A | xiii | |
| iron ores, Haliburton dist..... | 130 | R C | Leek island, St. LAWRENCE RIVER. | | |
| extract..... | 59, 60 | ii | Granite quarrying on..... | 296 | xi |
| Exhibit of, at World's Fair..... | 79-81 | ii | Leeman, H. | 102 A | xv |
| Mining agent..... | 238 | ii | Leetham, E. L. | 86 | ix |
| Notes by, on Belmont Bessemer Ore Co..... | 249 | iv | E. S. | 128, 129 | x |
| President, Ledyard G. M. Co. | 234, 235 | iv | Leferre, E. | 142 | x |
| Views of, on iron industry of Ont..... | 114-116 | ii | L. | 142 | x |
| gold mine, BELMONT TP., PETERBOROUGH CO. | | | Lefevre, E. C. | 24 | vi |
| Mill at..... | 4 | iv | Lefforriere, L. | 142 | x |
| Notes on..... | 51, 52 | iii | 74 | xi | |
| 231 | iv | | Legarde, F. | 117 | ix |
| 263 | v | | J. | 104 | vii |
| 58 | vi | | Legault, George | 44, 48 | xii |
| Position of..... | 193 | xi | Legge, C. H. AND Joshua | | |
| Quartz of, character..... | 36 | iv | Gold mining by, Michipicoten div..... | 104 | vii |
| Rocks of..... | 193, 194 | xi | 104 | viii | |
| Gold Mines Co. | | | 114, 117 | ix | |
| Capital and date of charter..... | 234 | iv | 139, 142 | x | |
| 10 | vii | | 74 | xi | |
| iron mine, BELMONT TP., PETERBOROUGH CO. | | | 66 | xii | |
| Estimate of cost of making pig iron at..... | 334, 335, 394 | R C | 48 A | xiii | |
| Intention re, 1894..... | 250 | iv | L. | 181, 104 | viii |
| | | | Leggett and Bros. | 122 | xi |
| | | | Legris, James. | 53 A | xiii |
| | | | Legrow, Jerry. | 48 | x |
| | | | Le Heup | 40 A | xiv |

| | Page. | Vol. | | Page. | Vol. |
|--|----------------|--------|--|----------|--------|
| Lehigh mt., LEHIGH CO., PENN. | | | Lepidomelane. | | |
| Iron ore of | 347 | R C | Occurrences of, and analysis | 201 | ix |
| Portland Cement Co. | | | <i>Leptæna</i> . | | |
| Capital and date of charter..... | 28 | A xvi | Gore Bay | 77 | B xiii |
| river, DELAWARE RIVER, U.S. | | | " <i>rhomboidalis</i> | 125 | xi |
| Iron ores on | 474 | R C | Anderdon tp..... | 146 | xii |
| mining..... | 118 | ii | Cayuga N. tp..... | 148 | xii |
| Ordinance works on | 140 | ii | Hagersville..... | 35 | xi |
| University, PENN. | | | Port Colborne, near | 152 | xii |
| Notes on, by Richards..... | 510 | R C | St. Marys..... | 144 | xii |
| Lehmann, Dr. Adolf | | | Walpole tp..... | 89 | B xiii |
| Analysis by, of corundum | 238 | vii | " <i>sericea</i> | 186 | A xiii |
| Leishmann and Maundrell..... | 20 | vii | Trent river | | |
| Leitch, George | 136 | i | <i>Leptostrophæa</i> | | |
| P. A..... | 105, 127 | A xvi | Kwataboahagan river..... | | |
| Leith, Dr. C. K. | | | Lequerre lake, SEINE RIVER DIST., | | |
| Benn cobalt mine bought by.... | 11 | A xv | R. R. D. | | |
| owned by (and friends)..... | 27, 28 | A xv | Gold mining on. <i>See</i> Roy Gold | | |
| Notes by, on glauconite and | | | Mg. Co. | | |
| greenalite..... | 164, 166 | A xiv | Lequyer, Adolphe | | |
| Paper, by on Moose Mt. iron | | | Gold mining by, Seine river..... | 133 | vii |
| range..... | 318-321 | xii | | 42 | viii |
| refs. to..... | 5, 21, 29, 216 | A xiii | | 80 | ix |
| Ref. to review by, on Miller's Co- | | | Leroy, GENESSEE CO. N.Y. | | |
| balt report..... | 7 | B xiv | Fossils from | 184 | A xiii |
| Ref. to work by, on Mesabi iron | | | lake, FIRE-SAND RIVER, MICH- | | |
| range | 258 | A xiv | PICOTEN RIVER, ALG. | | |
| | 159, 164 | A xv | Huronian rocks near | 146 | viii |
| Report by, and others, on Pre- | | | Lesage, J. | 142 | x |
| Cambrian nomenclature.... | 269-277 | A xiv | Lesley, J. P. | | |
| Lek river, HOLLAND. | | | Notes by, on cross anticlines.... | 161 | i |
| Brick kilns along, peat used in.. | 216 | ii | Views of, on origin of oil and gas. | | |
| Leland, Charles F. | 71 | ix | 144, 145, 150, 157, | 158 | i |
| LECLANAU CO., MICH. | | | Letellier, J. T. | 66 | xii |
| Record of iron furnace in | 339 | R C | | 48 | A xiii |
| Lemieux, C. | 66 | xii | Lethbridge, Charles | | |
| F. F. | | | Brick-yard of, Sault Ste. Marie, | | |
| Recorder, Sudbury mg. div..... | 36 | A xvi | notes..... | 57 | B xv |
| Report by, on Sudbury mg. div. | | | Lethbridge, (COAL BANKS), ALTA. | | |
| 39, | 40 | A xvi | Lignite of | 161 | A xiii |
| J. B. | 104 | vii | Lettuce. | | |
| M. | 74 | xi | Mentioned as growing at:— | | |
| Lemoyne, Capt. William. | 87 | vii | Abitibi lake..... | 50 | A xvi |
| Lennox, Hans. | 32 | vii | Matachewan..... | 240 | A xiv |
| Lennox—? | 80 | xii | New Post..... | 186 | viii |
| Lennox tp., ALG. | | | Leucopyrite (arsenical iron). | | |
| Soil and timber in | 142 | A xv | Carrying arsenic | 101 | xi |
| Leo Mining and Development Co. | | | Description of | 221 | vi |
| Capital and date of charter..... | 9 | x | Leucoxene. | | |
| Work by, near Middleton | 87 | x | Barriefield common, Kingston.. | 201 | ix |
| Leoben, STYRIA, AUSTRIA. | | | Leuiller, A. | | |
| Mining school at..... | 501, 513 | R C | Gold mining by, Manitou lake. 85, | 87 | vi |
| Leonard, R. W. <i>See</i> Coniagas silver | | | | 123 | vii |
| mine. | | | Leushner, Frank E. | | |
| Le Page, Phillip | | | Accident to..... | 49, 57 | xi |
| Gold prospecting by, Little Turtle | | | Mica claim owned by, Bedford tp. | 135 | x |
| lake..... | 71 | vii | Frederick P. | 279 | v |
| Leper, T. C. | | | Levack properties, LEVACK TP., | | |
| Experience of, as well-borer..... | 127 | i | ALG. | | |
| <i>Leperditia</i> . | | | Ilmenite in..... | 162 | C xiv |
| Winchester tp. | 40 | B xiii | Magnetically surveyed..... | 67 | C xiv |
| <i>Lepidium virginicum.</i> | | | Photo of | 208, 209 | A xiii |
| Abitibi Lake dist | 242 | A xiv | Rocks on..... | 198 | A xiii |
| Lepidolite. | | | | 68 | C xiv |
| Mode of occurrence..... | 226 | vi | norite, petrographical notes... | 211 | A xiii |
| Utoe island, Sweden..... | 472 | R C | tp., ALG. | | |
| | | | Copper and iron pyrites in..... | 434 | R C |
| | | | Nickel ore in, character..... | 89 | i |
| | | | prospecting for | 274 | v |

| | Page. | Vol. | | Page. | Vol. |
|--|----------|------|--|---------|------|
| Levack tp., ALG. — Con. | | | Lewis tp., ALG. | | |
| Ore deposits in, notes by Coleman | 197 A | xiii | Copper mining north of | 63 A | xiv |
| ..... | 65-67 C | xiv | Lewiston, ANDROSCOGGIN CO., ME. | | |
| See also Strathecona m. | | | Gravel bar at | 227 A | xiii |
| Rocks in, granite | 84 | i | Iroquois beach at | 233 A | xiii |
| greenstone | 75 | i | Waterpower at | 485 | R C |
| nickel eruptive | 68 C | xiv | Lexington, MIDDLESEX CO., MASS. | | |
| norite, petrography | 211 A | xiii | Peat drying experiments at | 197 | i |
| peridotite | 121 C | xiv | Liars. | | |
| Levat, David | | | Mining engineers | 168 | i |
| Paper by, on metallurgy of nickel | 149-162 | ii | Lias shales. | | |
| ref. to | 132 | ii | Alais, France | 192 A | xvi |
| Process of, for refining nickel | 146 | ii | Liberts, RIAZAN PROV., RUSSIA. | | |
| Ref. to description by, of treatment of Sudbury ores | 236 | xii | Peat near | 218 | ii |
| ..... | 3 C | xiv | Licences. | | |
| Levesque, Joseph | 51, 57 | xi | List of, issued in Michipicoten | | |
| Louis | 443 | R C | div. :— | | |
| Levett and Davis mica mine, RIDEAU LAKE. | | | 1897 | 101-106 | vii |
| Notes on, 1893 | 193 | iii | 1898 | 102-105 | viii |
| Levi, Leone | | | 1899 | 115-118 | ix |
| Notes by, on steel industry of Gt. Britain | 360, 366 | R C | 1900 | 140-144 | x |
| Levy —? | | | 1901 | 73-75 | xi |
| Ref. to work by, on nepheline | 227 | vii | 1902 | 65-67 | xii |
| creek, VERMILION RIVER, NIP. | | | Terms of | 229 | ii |
| Muskeg and clay on | 37, 38 | iv | Lichen | | |
| Rocks near mouth of | 37 | iv | Eaten by Indians, in extremity .. | 86 | vi |
| Huronian | 46 | iii | ..... | 141 | xii |
| Lewes, Prof. Vivian B. | | | Lichen island, RAINY LAKE, R. R. D. | | |
| On acetylene gas | 29 | vi | Rocks on | 81 | iv |
| Paper by, on Commercial Synthesis of Hydro-carbons | 142-151 | iv | Island Mining Co. | | |
| ref. to | 141 | iv | Capital and date of charter | 9 | x |
| Lewis, A. E. | 104 | vii | Lichenalia. | | |
| ..... | 117 | x | Hamilton | 141 | xii |
| ..... | 142 | x | Lidgey, H. | 246 | ii |
| C. J. | | | Lievre river, OTTAWA RIVER, QUE. | | |
| Brick making by, Milton | 66 B | xv | Apatite deposits on | 437 | R C |
| Prof. Carvill | | | Lievrite. See Apatite. | | |
| Notes by, on origin of diamonds in Kimberley | 122 | ix | Light, William | | |
| D. D. | 98 | xi | Brick yard of, Aylmer, notes | 62 B | xv |
| E. | 104 | vii | Lightning. | | |
| F. S. | 104 | viii | A cause of forest fires | 177 A | xiii |
| ..... | 117 | ix | Lignite. | | |
| ..... | 142 | x | Analyses of standard | 184 | i |
| G. | 104 | vii | ..... | 166 | xi |
| ..... | 104 | viii | As a fuel, notes on | 194 | xii |
| J. |  |  | ..... | 166 | vi |
| Terra-cotta making, Milton | 66 B | xv | 28, 29 A | xiii | |
| James F. | 52 | ix | Definition of | 161 A | xiii |
| M. | 66 | xii | Exhibited at World's Fair | 193 | ii |
| ..... | 48 A | xiii | Notes on, by Goodwin | 219 | vi |
| W. H. | | | Occurrences. See Coal. | | |
| Gold mining by, Michipicoten | | | Lilienberg, N. | | |
| div | 104 | viii | Kilns of, for magnetic ores | 478 | R C |
| ..... | 117 | ix | Lilium philadelphicum. See Lily, orange | | |
| 139, 142 | | x | " tigrum. See Lily, tiger | | |
| 74 | | xi | Lillin and Rochon. | | |
| 66 | | xii | ..... | 53 | v |
| 48 A | | xiii | 65, 66 | | iv |
| William O. | 45 | A | Lillooet, LILLOOET DIST., B.C. | | |
| Foundry and Machine Co. | 120 | ii | Souesite from | 151 C | xiv |
| | | | Lily. | | |
| | | | Lily lake, L. of the Woods dist. .. | 187 | v |
| | | | orange | | |
| | | | Obabicon lake, R.R. d. | 118 | vii |
| | | | Mattagami valley | 150 A | xv |
| | | | pond | | |
| | | | Moose River basin | 177 A | xiii |
| | | | spotted | | |
| | | | Abitibi dist. | 253 A | xiv |

| | Page. | Vol. | | Page | Vol. |
|-------------------------------------|------------------|------|---|--------------------|------|
| Lily, tiger | | | Lime.—<i>Con.</i> | | |
| Moose River basin | 177 A | xiii | Galt and Guelph | 126, 127 B | xiii |
| water | | | Humberstone | 134 | i |
| Atikokan river | 144 | v | Limehouse, photos | | |
| creek, MARMORA TP., HASTINGS | | | 16, 17, 32, 33, 64, 65 B | xiii | |
| CO. | 92 | vii | Milton, photo | 16, 17 B | xvi |
| creek, W. OF STURGEON LAKE, | | | Port Colborne, west of | 35 | xi |
| TH. B. AND R.R. DIST. | 147 | xi | Rockwood, photo | 16, 17, 126, 127 B | xiii |
| lake, SMITH TP., PETERBORO | | | St. Marys | 96, 126 B | xiii |
| CO. | | | Sherkston quarry, photo | 126, 127 B | xiii |
| Clay from, for cement works | 148 A | xiv | lake, HUNGERFORD TP., HAST- | | |
| lake, L. OF THE WOODS REG., | | | INGS CO. | | |
| R. R. D. | | | Marl from | 137 A | xiv |
| Rocks on; name of | 187 | v | paste. | | |
| of the Valley silver mine, | | | use of | 173 A | xiv |
| PAIPOONGE TP., TH. B. D. | | | phosphate of See Apatite. | | |
| Inspector's report on, 1891 | 229 | i | tungstate of See Scheelite. | | |
| 1892 | 241 | ii | water. | | |
| 1894, idle | 237 | iv | Notes on, by Miller | 6, 13 B | xiii |
| Limberger, Jacob | 124 | i | Limehouse, ESQUESING TP., HALTON | | |
| Lime. | | | CO. | | |
| See also Lime kilns and Lime- | | | Cement at | 177 | i |
| stone. | | | works at | 108 | i |
| Burning and slaking of, notes by | | | See also Toronto Lime | | |
| Miller | 7-11 B | xiii | Co. | | |
| Canada, production, 1887 | 213 | R C | Iron at (native) | 200 | ix |
| 1888 | 525 | R C | Lime kilns at | 14 A | xiii |
| Composition of | 448 | R C | photos, 16, 17, 32, 33, 64, 65 B | xiii | |
| Eddystone lighthouse, Eng., | | | Limestone quarries at, analysis .. | 58 B | xiii |
| analysis | 107 | i | Mineral pigments at | 177 | i |
| Evil of free, in cement | 125 A | xiv | made fire-proof | 79 | R C |
| Gas fuel for burning | 126 | i | Limerick, IRELAND. | | |
| 106 | ix | | tp., HASTINGS CO. | | |
| Guelph formation | 45 | R C | Galena in | 198 | ix |
| In paving brick, effect of | 121 | iii | mining | 30 | R C |
| Producers of, list, 1902 | 28 | xii | Limerock, LITCHFIELD CO., CONN. | | |
| Production, 1891 | 6 | i | Iron forge erected at, 1734 | 342 | R C |
| 1892 | 7, 11 | ii | Limestone. | | |
| 1893 | 6, 10 | iii | Analysis of, used by cement cos. | 183 A | xiv |
| 1894 | 11-13 | iv | Argenteuil, Que. | 11 | R C |
| 1895 | 11-13 | v | As a building-stone | 135 | iii |
| 1896 | 12, 13 | vi | notes by Miller | 3, 4 B | xiii |
| 1898 | 11, 12 | viii | Association of, with hematite .. | 466 | R C |
| 1899 | 12, 13 | ix | sulf and gyp- | | |
| 1900 | 11, 12, 14 | x | sum | 120 | R C |
| 1901 | 12, 13, 30 | xi | Cement made with | 106 | i |
| 1902 | 12, 13, 27, 28 | xii | Composition and formation of .. | 537 | R C |
| 1903 | 3, 13, 14 A | xiii | 2-5 | vi | |
| 1904 | 1, 3, 16 A | xiv | Exhibit of, at World's Fair | 186 | ii |
| 1905 | 1, 4, 16 A | xv | Findlay gas-field, Ohio | 120 | i |
| 1906 | 4, 6, 19 A | xvi | Hull, Que., for cement | 146 A | xiv |
| Teil, France, production | 107 | i | Laurentian, origin of | 13 | R C |
| United States, duty on | 132 | i | Ontario, report by Miller | Pt. B | xiii |
| production, 1887 | 213 | R C | eastern, report by Parks | | |
| 1888 | 525 | R C | on fossiliferous | 141-156 | xii |
| Value of, as compared with | | | Origin and nature of | 9-21 B | xiii |
| cement | 170, 171 A | xiv | Portland island, England | 118 A | xiv |
| — — — — — | | | Proportion of, in glass | 118, 119 | xi |
| Bridgewater marble for | 82 | R C | Quarrying industry, 1890 | 95-100 | i |
| L. Huron, north shores | 94 | i | St. John, N B., notes on industry .. | 10 B | xiii |
| Milton, analysis | 15 A | xiii | Test for | 450 | R C |
| Port Colborne, for Niagara Falls | | | uses of | 2-14 B | xiii |
| calcium carbide plant | 37 | v | | | |
| Rockland, for Ottawa Carbide Co. | 21 | x | | | |
| kilns. | | | Algoma dist | 26-33 B | xiii |
| Beachville, photos | 64, 65, 96, 97 B | xiii | Cartier, near; Geneva lake | 94 | i |
| Delta | 64, 65 B | xiii | French river | 192 | viii |
| "Drawing" a, photo | 16, 17 B | xiii | Garden River | 160 | viii |

| | Page. | Vol. |
|--|-----------|--------|
| Limestone. — <i>Con.</i> | | |
| Algonia dist.— <i>Con.</i> | | |
| Lake Huron | 94 | i |
| Manitoulin island | 75-80 | B xiii |
| St. Joseph island | 178 | ii |
| Kwataboahegan river, photo of, with fossils | 192, 193 | A xiii |
| Little Abitibi river, fossils | 187 | viii |
| Panache lake | 91 | i |
| Brant co. | 33-34 | B xiii |
| Paris, analysis | 147 | xii |
| Bruce co. | 34-37 | B xiii |
| Carleton co. | 37-39 | B xiii |
| Dufferin and Dundas cos | 39, 40 | B xiii |
| Durham and Elgin cos | 40, 41 | B xiii |
| Essex co. | 41-43 | B xiii |
| Anderdon tp., quarried | 126 | xi |
| Frontenac co. | 43-46 | E xiii |
| Glengary co. | 46-48 | B xiii |
| Greenville and Grey cos | 48-51 | B xiii |
| Haldimand co. | 51-56 | B xiii |
| Hagersville, analysis | 115 | xii |
| fossils | 144-147 | xii |
| Springvale, analysis | 144 | xii |
| Haliburton co. | 56, 57 | B xiii |
| Halton co. | 57-59 | B xiii |
| Milton | 55 | i |
| Hastings co. | 59-66 | B xiii |
| Crookston, quarried | 99 | vii |
| 48 | viii | |
| Thurlow tp., analysis | 33, 34 | xii |
| Belleville (near) | 133 | A xiv |
| photo | 134 | A xiv |
| Huron and Kent cos | 66-68 | B xiii |
| Launton co. | 68-70 | B xiii |
| Lanark co. | 70-73 | B xiii |
| associated with iron | 138, 139 | R C |
| Bathurst tp. | 137 | R C |
| Smiths Falls | 59 | i |
| Lennox and Addington co. | 26-29, 73 | B xiii |
| Lincoln co. | 73, 75 | B xiii |
| Queenston, for building | 14 | A xiii |
| Middlesex co. | 80 | B xiii |
| Muskoka dist | 81 | B xiii |
| Nipissing dist | 81-88 | B xiii |
| Abitibi river | 190 | viii |
| Sextant rapid, photo | 200, 201 | viii |
| Haileybury, analysis | 32 | xiv |
| Opasatika river, analysis | 152 | A xiii |
| Norfolk and Northumberland cos | 88, 89 | B xiii |
| Ontario co. | 89-91 | B xiii |
| Oxford co. | 91, 92 | B xiii |
| Beachville, analysis | 148, 149 | xii |
| Parry Sound dist | 92-95 | B xiii |
| associated with anorthosite | 11 | R C |
| McKellar, near, quarried | 169 | ix |
| Peel co. | 95 | B xiii |
| Perth co. | 95-97 | B xiii |
| St. Marys | 59 | i |
| analysis | 151 | xii |
| Peterboro' and Prescott cos | 97-99 | B xiii |
| Prince Edward co. | 99, 100 | B xiii |
| Rainy River dist | 100 | B xiii |
| Rainy river, boulders burned for lime | 76 | iv |
| Steep-rock lake | 71 | v |
| 78 | vi | |
| associated with iron | 76 | ii |
| 307, 308 | xii | |

| | Page. | Vol. |
|--|---------------|--------|
| Limestone. — <i>Con.</i> | | |
| Renfrew co. | 101-107 | B xiii |
| McNab tp. | 142 | R C |
| Russell co. | 107-109 | B xiii |
| Rockland, analysis | 21 | x |
| Simcoe and Stormont cos | 109-111 | B xiii |
| Thunder Bay dist | 111, 112 | B xiii |
| Animikie range, analysis | 163 | A xv |
| Kwataboahegan river | 192, 193 | A xiii |
| L. Superior, north of, notes by Logan | 130, 132 | vi |
| Victoria and Waterloo cos | 112-116 | B xiii |
| Welland co. | 116-120 | B xiii |
| Port Colborne (near), boring in | 27, 28 | A xv |
| notes and fossils | 34, 35 | xi |
| Wellington co. | 120-123 | B xiii |
| associated with iron | 139 | R C |
| Wentworth co. | 123-126 | B xiii |
| Ancaster, analysis | 142 | xii |
| York co. | 126 | B xiii |
| bituminous | | |
| Abitibi river | 128 | iv |
| 159 | A xiii | |
| crystalline | | |
| <i>See also</i> Limestone for flux. | | |
| Asia Minor, with corundum | 241 | viii |
| Bolton, Mass | 472 | R C |
| Burma, with corundum | 62 | vi |
| 213 | vii | |
| 231, 241 | viii | |
| Characteristic of Laurentian | 250 | v |
| For marble, eastern Ont | 234 | vii |
| Greece, with corundum | 241 | viii |
| Hull tp., Que., with iron | 53 | ii |
| India, with corundum | 231 | viii |
| Minerals associated with | 472 | R C |
| list of | 21 | B xiii |
| Nepheline-syenite mistaken for | 210 | vii |
| Notes on, by Miller | 20, 21 | B xiii |
| Burleigh tp. | 212 | viii |
| Burgess, N. tp., with corundum | 214 | vii |
| wollastonite | 212 | ix |
| Craigmont, near, photo | 88 | A xvi |
| Frontenac co. | | |
| Barrie tp., cut by calcite | 206 | xi |
| with iron | 134 | R C |
| Bedford tp. | 52 | R C |
| Loughborough tp | 149 | R C |
| with apatite | 53 | R C |
| Olden tp., with silver | 209 | ix |
| Hastings co. | | |
| associated with corundum | 216, 222 | viii |
| iron | 37, 38, 45-48 | ii |
| 54, 55 | ii | |
| pyrrhotite | 197 | xi |
| notes by Miller | 213 | vii |
| Larder lake, notes and photo | 207, 208 | A xvi |
| with gold | 221 | A xvi |
| Leeds co. | | |
| Seely Bay, holding graphite | 230 | vii |
| Sharbot lake (near), tremolite in | 211 | ix |
| Niagara tp. | 96 | i |
| Nipissing lake | 68 | i |
| Iron island, with iron | 63 | ii |
| Parry Sound dist | 94 | i |
| 170 | ix | |
| notes by Coleman | 166 | ix |

| | Page. | Vol. | | Page. | Vol. |
|---|----------|--------|---|--------------|--------|
| Limestone, crystalline—<i>Con.</i> | | | Lincolnshire, ENGLAND. | | |
| Snowdon tp., with hematite . . . | 131 | R C | Iron in, royalties on | 18 | i |
| Talon, Nip. | 68 | i | Lind, John | 141 | A xiv |
| Thorold tp. | 108 | i | Lindall, Edward | 29 | ix |
| Thorold | 164 | A xiv | Linden lake, GENESSEE CO., MICH. | | |
| for flux. | | | Copper mining on. <i>See</i> Calumet | | |
| Canada, production, 1886-87 . . . | 243 | R C | and Hecla. | | |
| 1888. | 525 | R C | Steel Mill, PITTSBURG. | | |
| General | 479 | R C | Output of, 1893 | 119 | ii |
| Humberstone | 134 | i | Wages paid by, statistics | 370 | R C |
| Kelly island | 340 | R C | Linderman, R. P. | | |
| United States:— | | | Correspondence between, and | | |
| Detroit, cost of. | 399 | R C | Ritchie | 107, 108 | ii |
| Ohio and St. Louis, cost of. . . | 392 | R C | Lindsay, Hamilton | 67, 71 | xi |
| Petosky, Mich. | 98 | xi | and McCutcheon. | | |
| production, 1888. | 525 | R C | Labour employed by, statistics. . | 370 | R C |
| magnesian <i>See</i> Dolomite. | | | Joseph C. & Co. | 119 | ii |
| "Limestone city." <i>See</i> Kingston. | | | Lindsay, OPS TP., VICTORIA CO. | | |
| Limestone creek, NELSON TP., HAL- | | | Artesian wells in | 59 | i |
| TON CO. | | | Bricks at, price, 1903. | 15 | A xiii |
| Limestone quarry at. | 104 | i | Brick-yards at, notes and photos. | | |
| islands, GEORGIAN BAY, L. | | | 100-102 | B | xv |
| Huron. | | | 113 | B | xiii |
| Analysis of limestone from. . . . | 92 | B xiii | Linge river, HOLLAND. | | |
| Limfjord, DENMARK. | | | Brick-kilns along, peat used in. . | 216 | ii |
| Peat works near. | 211 | ii | Lingham, F. R. | 224 | i |
| Limonite (BOG-IRON ORE.) | | | M. | | |
| <i>See also</i> Iron. | | | Brick-yard of, Belleville. | 69 | B xv |
| Definition of. | 537 | R C | clay for, analysis. | 17 | B xv |
| Determination of. | 204, 215 | vi | <i>Lingula c. madensis.</i> | | |
| Hardness of. | 202 | vi | Cobourg | 40, 89 | B xiii |
| Magnetic permeability of. | 324 | xii | Link lake, NEAR PIPESTONE LAKE, | | |
| Occurrences of | 201 | ix | R. R. D. | | |
| mode of. | 529 | R C | Keewatin rocks on. | 61 | iv |
| Prospecting for, hints on | 454 | R C | Linn, Robert | 31, 33 | iii |
| Quebec prov. | 26, 27 | ii | <i>Linnaea borealis.</i> | | |
| Three Rivers. | 400, 401 | R C | Abitibi Lake dist. | 241 | A xiv |
| Specific gravity of. | 202 | vi | Mattagami valley | 150 | A xv |
| | | | Linnæite. | | |
| | | | Hardness of. | 202 | vi |
| | | | Joachimsthal, Bohemia. | 61 | B xiv |
| | | | Specific gravity of. | 202 | vi |
| | | | Linnaeus. | 89 | iii |
| | | | Linney, H. | 80 | A xv |
| | | | Linning peat process. | 193 | i |
| | | | Linoleum. | | |
| | | | Yellow-ochre for. | 170 | A xvi |
| | | | Lintley, Thomas. | 201, 206-210 | iv |
| | | | Linton, John | 29 | ix |
| | | | R. | | |
| | | | Views of, on arsenic in glass- | | |
| | | | making. | 118 | xi |
| | | | Lintonite. <i>See</i> Thomsonite | | |
| | | | Liskeard Brick, Coal and Lumber | | |
| | | | Co. | | |
| | | | Exhibits of, at Buffalo. | 25 | A xv |
| | | | Yard of, at New Liskeard. | 83 | B xv |
| | | | L'Islet, L'ISLET CO., QUE. | | |
| | | | Bog-iron ore experiment on . . . | 53 | ii |
| | | | <i>Listera cordata.</i> | | |
| | | | Mattagami valley | 150 | A xv |
| | | | Litchfield, MAINE. | | |
| | | | Nepheline-syenite from. | 209 | xi |
| | | | Lithium mica. <i>See</i> Lepidolite. | | |
| | | | Lithographic stone. | | |
| | | | Analyses and occurrences, paper | | |
| | | | by Volney | 181-184 | ii |
| | | | Anderdon tp. | 126 | xi |
| | | | Brant tp. | 36 | B xiii |
| co. | | | | | |
| Brick yards in, notes | 77-79 | B xv | | | |
| Limestone in, notes by Miller. . . | 73 | B xiii | | | |
| gold mine, MICHIGICOTEN DIV., | | | | | |
| ALG. | 113 | ix | | | |

| | Page. | Vol. |
|--|------------|-----------|
| Lithographic stone.—<i>Con.</i> | | |
| Burleigh Falls, near..... | 213 | viii |
| Collingwood, analysis..... | 110 B | xiii |
| Harvey tp., exhibited at Pan- American Exhibition..... | 58 | xi |
| Madoc..... | 41, 53 | R C |
| | 204 | xi |
| Marmora tp..... | 41, 53 | R C |
| | 213 | viii |
| Crow lake, analyses..... | 60, 61 B | xiii |
| notes..... | 137, 138 | iii |
| Marmora..... | 194 | xi |
| | 59 B | xiii |
| mining..... | 9 | iii |
| shewn at Pan-American Ex... | 88 | xi |
| Notes on, by Miller..... | 6 B | xiii |
| Rattlesnake creek, Grand river.. | 55 B | xiii |
| Saugeen river..... | 45 | R C |
| Tay tp., analysis..... | 110 B | xiii |
| Walkerton (near)..... | 36 B | xiii |
| <i>Lituan canadense.</i> | | |
| Abitibi Lake dist..... | 242 A | xiv |
| Little, E. A. | 67, 71 | xi |
| John C. | 59 | xii |
| Abitibi lake, LITTLE ABITIBI RIVER | 188 | viii |
| Abitibi river, ABITIBI RIVER. | | |
| Forest fires on..... | 177 A | xiii |
| Notes on, by Parks..... | 186, 187 | viii |
| Pre-Cambrian rocks on..... | 138, 140 A | xiii |
| America gold mine, BLACK BAY, RAINY LAKE, MINN. | | |
| Chlorite schists of..... | 85 | iv |
| First to operate on Rainy lake .. | 41 | iv |
| Kewatin rocks of..... | 59 | iv |
| Notes on, by Coleman..... | 2, 53, 54 | 6 Bull. i |
| | 117 | iv |
| | 62 | v |
| Shut down, 1895..... | | |
| Bear lake, NEAR SKUNK LAKE, NIVEN'S BASE LINE, ALG. | 138 | ix |
| Bear river, L. SUPERIOR. | | |
| Minor ref. to..... | 282, 285 A | xiv |
| Rocks near mouth of..... | 348 A | xiv |
| Beaver lake, MICHIGICOTEN DIV., ALG. | 285, 291 A | xiv |
| "Little Bobs" Mining Co. | | |
| Capital and date of charter..... | 9 | x |
| Little Canada gold mine, RAINY LAKE, R. R. D. | | |
| Granite in, altered..... | 87 | v |
| Canada island, RAINY LAKE, R. R. D. | | |
| Rocks on..... | 59, 90 | iv |
| Cedar creek, ABITIBI RIVER. | | |
| Lignite near..... | 188 | viii |
| | 169 A | xiii |
| Marine shells on (recent)..... | 191 | viii |
| Notes on main river near..... | 189 | viii |
| Surveys on, ref. to..... | 138 A | xiii |
| Cedar lake, BURLEIGH TP., PE- TERBORO' CO. | | |
| Rocks on..... | 213 | viii |
| Current, HOWLAND TP., ALG. | | |
| Gas at..... | 140 | i |
| Iron prospecting at..... | 97 | vii |
| Rocks at and near..... | 76, 77 B | xiii |
| granite, for building..... | 93 | i |
| Huronian..... | 109 | R C |

Little Current.—*Con.*

| | | |
|--|----------|------|
| Rocks at and near.—<i>Con.</i> | | |
| Trenton..... | 41 | R C |
| | 86 | i |
| | 75 B | xiii |
| quarried..... | 74, 84 | R C |
| Dan arsenic mine, ARSENIC LAKE, TIMAGAMI REG., NIP. | | |
| Mispickel from, analysis..... | 23 B | xiv |
| Notes on, 1905..... | 88 A | xv |
| Work at, 1905..... | 30 B | xiv |
| Dog lake, KAMINISTIKWIA RIVER, TH. B. D. | | |
| Forest fires on..... | 205 | v |
| Forks river, RAINY LAKE, R. R. D. | 164 | v |
| George gold mine, NEAR WAWA LAKE, ALG. | | |
| Notes on, by Willmott..... | 195 | vii |
| Gros Cap, L. SUPERIOR. | | |
| Description of lake shores from, to Montreal river..... | 130-132 | viii |
| Iron ore at and near..... | 183 | ix |
| mining, early..... | 11 Bull. | iii |
| notes..... | 254 | viii |
| | 154, 155 | ix |
| Notes on vicinity of..... | 202 | vii |
| Hawk lake, GRASSY RIVER, ALG.-NIP. LINE. | | |
| Ash rocks near..... | 176 | vi |
| Geological notes on..... | 178 | vi |
| Glaciation on..... | 181, 182 | vi |
| Map of, sketch..... | 175 | vi |
| Notes on vicinity, by Burwash.. | 176 | vi |
| Jumbo gold mine, VAN HORNE TP., R. R. D. | 125 | vii |
| Kwatabohegan river, KWAT- ABOHEGAN RIVER, ALG. | | |
| Swamp at, source of..... | 116 A | xiii |
| lake, N. OF CHIPPEWA RIVER, L. SUPERIOR. | | |
| Notes on country around.... | 201, 202 | viii |
| Lakes, NEAR STRATFORD, PERTH CO. | | |
| Erie clay from, analysis..... | 14 B | xv |
| Long lake, LONG LAKE, NIP- IGON LAKE REG., TH. B. D. | | |
| Iron ore on..... | 23 | R C |
| hematite..... | 65 | ii |
| Manitou island. See McDon- ald island. | | |
| Master gold mine, KABAG- UKSHI LAKE, MANITOU LAKE DIST., R. R. D. | | |
| <i>See also Summit Lake G. Mg. Co.</i> | | |
| Fire at..... | 43, 58 A | xvi |
| Notes on, 1903..... | 68, 69 A | xiii |
| 1904..... | 53, 54 A | xiv |
| Operating, 1902..... | 92 | xii |
| Shut down..... | 52 A | xv |
| Vein in, photo..... | 48, 49 A | xiii |
| Miami river, OHIO RIVER, U.S. | | |
| Cincinnati group on..... | 116 | i |
| Missinaibi lake, ALG. | | |
| Notes on, by Parks..... | 140 | ix |

| | Page. | Vol. |
|--|-------------|--------|
| Little Missinaibi river, MISSINAIBI LAKE, ALG. | | |
| Navigation of..... | 140 | ix |
| Waterpower near..... | 142 | x |
| Mountain lake, MERRITT TWP., PETERBORO CO. | | |
| Corundum on..... | 211 | viii |
| Position of..... | 207 | viii |
| Rocks of..... | 208 | viii |
| (OR PETITE) Nation river. See Nation river. | | |
| Nipissing Silver Cobalt Mg. Co. | | |
| Capital and date of charter..... | 28 | A XVI |
| Pic river, L. SUPERIOR. | | |
| Aninikie rocks near..... | 238 | iv |
| Copper on..... | 63 | R C |
| Iron ore on..... | 36 | R C |
| exhibited at World's Fair..... | 79 | ii |
| magnetic..... | 65 | ii |
| Silver on..... | 202 | R C |
| Pig silver mine, PORT ARTHUR DIST., TH. B. D. | 199 | R C |
| Pike lake, NEAR KAMANISTIKWIA, TH. B. D. | | |
| Iron claims on..... | 314 | xii |
| Pine brook, BRUCE CO. | | |
| Cherty beds near, fossiliferous.. | 35 | B XIII |
| Pine lake, LITTLE PINE RIVER, KENOGAMI RIVER, TH. B. D. | | |
| Iron ore on..... | 314 | xii |
| pt., L. ERIE. | | |
| Cincinnati anticline near..... | 42 | R C |
| | 116 | i |
| rapid, MISSISSAGI RIVER, ALG. | | |
| Agricultural land near..... | 152 | viii |
| Rapids apatite mine, PORTLAND TWP., OTTAWA CO., QUE. | | |
| Character of deposit..... | 178, 179 | R C |
| Sugar apatite in..... | 442 | R C |
| river, ADIRONDACK MTS. | | |
| Iron ore on, treatment of..... | 349 | R C |
| Rock Consolidated Mg. and Development Co. | | |
| Capital and date of charter..... | 5 | xii |
| Work by, Seine river..... | 71 | A XIII |
| Salmon lake, CASHEL TWP., HASTINGS CO. | | |
| Iron pyrites on..... | 163 | A XVI |
| Silver vein, NIPISSING MINES, COBALT, NIP. | | |
| Greywacke slate near, analysis.. | 18 | B XIV |
| Huronian rocks near..... | 40 | B XIV |
| Open-cut on, sketch plan..... | 53 | B XIV |
| Outcrop of, photo..... | Frontis. | B XIV |
| Specimen from, at Louisiana Exhibition..... | 16 | B XIV |
| Work on, notes..... | 79 | A XV |
| Stobie nickel mine, BLEZARD TWP. | | |
| Boring near, notes on..... | 111 | C XIV |
| Production, 1902..... | 125 | xii |
| Prospecting on..... | 273 | v |
| Rocks in and near..... | 254 | xii |
| | 55, 81, 116 | C XIV |
| gabbro..... | 294 | xii |
| Worked by Mond Nickel Co..... | 143 | C XIV |

| | Page. | Vol. |
|--|---------------|------------|
| Little Stoney portage, MICHIPICOTEN RIVER, ALG. | | |
| Length of..... | 188 | vii |
| Photo of river at..... | 140, 141 | vii |
| Rocks on..... | 203 | vii |
| tp., NIP. | | |
| Brick-clay in..... | 207 | A xiv |
| Glacial drift in..... | 187 | A xiv |
| Peat in..... | 198 | A xiv |
| Schists in, quartzose..... | 198 | A xiv |
| stained by limonite... | 211 | A xiv |
| Soil from, analysis..... | 246 | A xiv |
| Timber in..... | 197, 198, 224 | A xiv |
| Trout bay, L. SUPERIOR. | | |
| Rocks in vicinity of..... | 149 | ix |
| Trout lake, N. OF L. SUPERIOR. | 285 | xiv |
| Turtle lake, N. OF BAD VERMILION LAKE, R.R.D. | | |
| Fahlbands near..... | 118 | vi |
| Gold mining on, 1896..... | 6 Bull. | i |
| | 82, 117 | vi |
| | 1897..... | 71, 72 |
| | 1898..... | 46, 79, 80 |
| Gneisses near, character..... | 80 | iv |
| Iron ore westward from..... | 134 | x |
| Keewatin rocks near..... | 49 | iv |
| Sandstone on..... | 183 | ix |
| iron-bearing..... | 184 | ix |
| Surveyed, 1893..... | 40 | iv |
| Turtle river, RAINY LAKE DIST., R.R.D. | | |
| Agricultural land near..... | 67 | v |
| Contact of Huronian and Laurentian on..... | 129 | vii |
| Gold mining in and near..... | 57 | iv |
| | 64, 67 | v |
| <i>See also</i> Alice g. m. | | |
| Veins on, bedded, sketch of..... | 51 | iv |
| Vermilion lake, R.R.D. See Vermilion lakes. | | |
| Wabigoon lake. See Dinorwic lake. | | |
| Wabigoon narrows, DINORWIC LAKE, R.R.D. | | |
| Rice and other water plants at.. | 67 | iv |
| Wabigoon river, WABIGOON LAKE, R.R.D. | | |
| Minor ref. to..... | 123 | vii |
| Notes on..... | 126 | vii |
| Whale river, HUDSON BAY, LAB. | | |
| Coal near..... | 126 | iv |
| Live Post gold claim, NEAR MOORE BAY, L. OF THE WOODS, R.R.D. | | |
| | 21 | iii |
| Liverpool, ENGLAND. | | |
| Canadian apatite shipments to, 1884-5..... | 443 | R C |
| Livingstone, Alex. | | |
| Gold mining by, near Abrams lake..... | 178, 180 | vii |
| J. A. | 125 | vii |
| M. L. | 103 | i |
| Lizards. | | |
| Lizard island, L. Superior..... | 131 | viii |
| McCann tp..... | 253 | A xiv |
| Lizard island, L. SUPERIOR. | | |
| Notes on, by Coleman..... | 131 | viii |

| | Page. | Vol. | | Page. | Vol. |
|--|----------|--------|---|----------|--------|
| Lizzie (OR VIRGINIA) gold mine, STURGEON LAKE, L. OF THE WOODS. | | | Locusts. | | |
| Depth of, 1899..... | 35 | ix | Abitibi dist..... | 129 | A xiii |
| Idle, 1900..... | 75 | x | Lodestone. | | |
| Notes on, 1898..... | 59, 60 | viii | Madoc tp..... | 82 | ii |
| 1899..... | 46, 47 | ix | | 201 | ix |
| Work at, 1903..... | 64 | A xiii | Lodi, ROXBOROUGH TP., STORMONT CO. | | |
| iron mine. See Robertsville | | | Trenton formation in..... | 48, 111 | B xiii |
| iron mine. | | | Loess. | | |
| Lloyd, E. B. | 173 | xii | Definition of..... | 537 | R C |
| S..... | 108 | ix | Log Cabin Gold and Copper Co. | | |
| H., Son & Co..... | 119 | ii | Capital and date of charter..... | 11 | xi |
| | 370 | R C | Minor ref. to..... | 242 | xi |
| lake, NEAR WHITE-CLAY RIVER, | | | jams. | | |
| ABITIBI RIVER..... | 185 | xii | Abitibi dist..... | 208 | A xiv |
| Lloyda gold mine, MICHIPICOTEN | | | Onaping river, photo..... | 224, 225 | A xiii |
| DIV., ALG. | | | Logan, J. | | |
| Notes on, 1901..... | 64 | xii | Brick works of, Toronto..... | 29 | xii |
| Loadstone. See Lodestone. | | | | 109, 110 | B xv |
| Lobb, James | 396, 486 | R C | photo..... | 48 | B xv |
| <i>Lobelia.</i> | | | shale for, analysis..... | 8 | B xv |
| Abitibi dist..... | 253 | A xiv | J. W. | 292 | xi |
| " <i>kalmii</i> | | | Sir William E. | | |
| Mattagami valley..... | 150 | A xv | Appointed Director, Geological | | |
| " <i>spicata</i> | | | Survey of Canada, 1843..... | 408 | R C |
| Abitibi dist..... | 241 | A xiv | | 220 | i |
| Lobstick portage, ABITIBI RIVER. | | | Average elevation of Archæan | | |
| Notes on, by Parks..... | 184 | viii | areas given by..... | 193 | v |
| Rocks at and near..... | 193 | viii | Clays of Ontario classified by.... | 126 | iii |
| angite-syenite..... | 185 | viii | Copper-bearing series of L. Super- | | |
| Waterpower at..... | 193 | viii | ior pointed out by..... | 67 | R C |
| Locations. See Mining claims. | | | Description by, of:— | | |
| Loch Alsh, DOG LAKE, MICHIPICOTEN | | | gypsum, Grand river..... | 110 | i |
| DIV. | | | Keweenaw series in Michi- | | |
| Minor ref. to..... | 187 | vii | picoten div..... | 204 | vii |
| Portage near, photo..... | 140 | vii | Devonian pebbles found by, near | | |
| Striae near..... | 197 | vii | Pic island..... | 157 | viii |
| Earne, NEAR SHEBANDOWAN | | | Doré River conglomerate describ- | | |
| LAKE, R.R.D. | | | ed by..... | 183 | ix |
| Huronian on..... | 81 | v | Economic importance of Huron- | | |
| Minor ref. to..... | 127 | v | ian recognized by..... | 249 | v |
| Notes on, by Blue..... | 126 | v | Estimate by, of:— | | |
| Lochiel, LOCHIEL TP., GLENGARRY CO. | | | iron ore in sight, Bruce mines, | | |
| Chazy limestone at..... | 46 | B xiii | 1848..... | 177 | ii |
| tp., GLENGARRY CO. | | | in Christie lake, thick- | | |
| Limestone in..... | 99 | B xiii | ness..... | 137 | R C |
| Calciferous..... | 46, 47 | B xiii | Laurentian N. of Ottawa river, | | |
| Lochrie, James | | | thickness..... | 168 | i |
| Brick-making by, Carlton West. | 107 | B xv | Extract from report by, on L. | | |
| Lock(s). | | | Timiskaming..... | 41 | B xiv |
| Canadian imports of, 1881-87.. | 251, 468 | R C | Geological nomenclature by.... | 4 | R C |
| Locke, Daniel | | | Huronian..... | 535 | R C |
| Analysis by, of matte, Sudbury | | | Laurentian..... | 100 | vi |
| dist..... | 152, 153 | C xiv | Huronian areas mapped by... 122, | 157 | viii |
| Lockerby, D. L. | 58 | xii | | 182 | ix |
| Lockhart, Alex. | 56 | iv | Knighting of, ref. to..... | 219 | i |
| Lockman, E. W. | 131 | vii | Laurentian system defined by... 194 | | v |
| Lockport, NIAGARA CO., N.Y. | | | Map by, of Bruce Mines region.. | 91 | R C |
| Calcium carbide manufactured at. | 37 | v | Notes by, on:— | | |
| | 31 | vi | Canadian iron ore exhibit, Lon- | | |
| Lockwood, J. | 104 | vii | don, 1851..... | 33 | ii |
| W. M. | 104 | vii | geology of N. shore, L. Superior. | | |
| Locomotives. | | | | 123, 129 | vi |
| Imports of, to Canada, 1881-87.. | 248 | R C | Huronian of Doré river..... | 162 | xi |
| Nickel for..... | 145 | ii | peat in Ontario..... | 190 | i |
| Scrap mica for..... | 34 | vi | Oil cited by, Gaspé co., Que..... | 93 | A xiv |
| Steel tires for, cost of..... | 387 | R C | Social qualities of..... | 219 | i |
| | | | Surveys by, refs. to:— | | |
| | | | Great Lakes, The..... | 70 | i |
| | | | Mamainse pen..... | 78, 80 | iii |

| | Page. | Vol. | | Page. | Vol. |
|--|--------|--------|--|------------|-------|
| Logan, Sir William E.—<i>Con.</i> | | | Londonderry, COLCHESTER CO., N.S. | | |
| Surveys by, refs. to.— <i>Con.</i> | | | Cobalt and nickel from..... | 60 | B xiv |
| Nipissing dist..... | 81, 83 | B xiii | Iron ore from, quality..... | 401 | R C |
| Timiskaming lake..... | 32 | B xiv | Iron Co. | | |
| Port Arthur dist..... | 32 | R C | Bounties to..... | 28 | ii |
| 126, 136 | vi | | Output of..... | 85 | ii |
| Views of, regarding:— | | | Lone Jack gold mine, VAN HORNE | | |
| a Museum of economic geology..... | 522 | R C | TR., R.R.D..... | 125 | vii |
| anticlinal theory in connexion | | | Lonely lake, KEE. AND ONT. <i>See</i> | | |
| with gas and oil..... | 115 | i | Lac Seul. | | |
| gypsum on Grand river..... | 120 | R C | lake, MICHIGICOTEN DIV., ALG. | | |
| iron ore of Ottawa valley..... | 32 | ii | 293, 344 | A xiv | |
| Laurentian system..... | 244 | v | Long, H. | 43, 44, 48 | xii |
| Upper..... | 10, 11 | R C | H. E. | | |
| marble from Barrie tp..... | 80 | R C | Copper mining by, N. of L. Hur- | | |
| mineral resources of Upper | | | on..... | 67 | A xiv |
| Lake reg..... | 255 | R C | 70 | A xv | |
| Silver Islet vein..... | 34 | R C | photo of veins..... | 63, 66 | A xiv |
| Work by, in Wales, ref. to..... | 21 | ix | Long, Major | | |
| Gregg & Co. | 119 | ii | Notes by, on customs mills in | | |
| mt., SHICKS-ROCK RANGE, QUE. | | | Colorado..... | 34 | iii |
| Nomenclature of..... | 220 | i | bay, L. OF THE WOODS, R.R.D. | | |
| tp., PERTH CO. | | | Asbestos near..... | 195 | ix |
| Boring in for salt; brick-making | | | Dimensions of..... | 181 | v |
| in. <i>See</i> Mitchell and Monkton. | | | Geology of..... | 103 | vi |
| Loganite. | | | rocks..... | 100 | vi |
| N. Elmsley and N. Burgess tps.. | 201 | ix | Notes on, by Coleman..... | 93 | vi |
| Lollingite. | | | Photo of Sunday camp on..... | 80, 81 | vi |
| Carrying arsenic..... | 101 | xi | inlet, L. HURON. | | |
| Galway tp., analysis..... | 201 | ix | Singular straightness of..... | 67 | i |
| Lombard and Hardin. | 54 | iii | island, JAMES BAY, LAB. | | |
| Lomer, Rohr and Co. | | | Anthracite (? anthraxolite) on.. | 126 | iv |
| Apatite mining by, Loughboro tp. | 240 | i | Jasper on..... | 93 | v |
| Lonahan, Thomas. | 187 | vii | Rocks on..... | 86 | i |
| London, LONDON CO., ENG. | | | lake, BARRIE TP. <i>See</i> Kashiwak- | | |
| Alabastine manufactured in..... | 254 | ii | aniak lake. | | |
| Apatite shipments to, 1884-85.... | 443 | R C | lake, BLANCHE RIVER, NIP. | | |
| Coal-gas of, quality and price.... | 150 | iv | Falls at, utilized..... | 14 | A xv |
| Exhibition in <i>See</i> Exhibitions. | | | lake, COLEMAN TP. <i>See</i> Cobalt | | |
| Stocks and bonds in, depression, | | | lake. | | |
| 1894..... | 7 | iv | lake, E. OF L. OF THE WOODS, | | |
| London, MIDDLESEX CO., ONT. | | | R. R. D. | | |
| Brick-kiln at, photo..... | 51 | B xv | Boring on, for gold..... | 52 | x |
| Clay at, notes and photo..... | 28, 29 | B xv | lake, E. OF MANITOU LAKE, | | |
| Oil refineries at..... | 157 | R C | R. R. D..... | 126 | vii |
| Sulphuric acid manufactured at... 200 | A xvi | | (OR TEN-MILE) lake, E. OF ONA- | | |
| Syncline west of..... | 54 | i | PING LAKE, ALG. | | |
| Water supply of..... | 60, 61 | i | Country in vicinity of, notes.... | 154 | x |
| boring for..... | 152 | R C | lake, MATTAGAMI RIVER. <i>See</i> | | |
| 80 | B xiii | | Kenogamisee lake. | | |
| springs..... | 55 | i | lake, MISSISSIPPI RIVER, ONT. | | |
| and Canadian Mining and | | | Limestone north of, character... 45 | B xiii | |
| Development Co. | | | lake, N. OF ENGLISH RIVER, | | |
| Capital and date of charter..... | 11 | xi | R. R. D. | | |
| Brick Manufacturing and | | | Character of country S. of..... 173, 174 | vii | |
| Supply Co. | | | Geology of vicinity..... | 165 | vii |
| Brick works of, notes and photo. | | | Rocks near..... | 167 | vii |
| 80, 81 | B xv | | Timber near..... | 181 | vii |
| Builders' Supply Co. | | | lake, N. OF L. SUPERIOR, TR. B.D. | | |
| Brick-kiln of, photo..... | 51 | B xv | Country in vicinity of, descrip- | | |
| =Elgin Oil Co. | | | tion..... | 111, 112 | iv |
| Capital and date of charter..... | 9 | xii | Iron near (with jasper)..... | 200 | x |
| Gold Mining Co. | 86 | R C | prospecting..... | 265 | xi |
| Oil Co. | | | Huronian rocks on..... | 18 | R C |
| Capital and date of charter..... | 10 | vii | 124 | iv | |
| purple. | | | Moraine on..... | 50 | R C |
| Description and use of..... | 113 | xi | Road from, to Jackfish bay..... | 9 | vi |
| Mode of formation..... | 120 | xi | 34 | vii | |

| | Page. | Vol. | | Page. | Vol. |
|---|-----------------|------|--|--------------|------|
| Long lake, N. E. of LOONSKIN LAKE, | | | Longford Mills, RAMA TP., ONTARIO | | |
| MICHIPICOTEN DIV., ALG. | | | CO | | |
| Cavern near..... | 171 | xi | Charcoal plant at..... | 3 B | xiii |
| Iron ore near..... | 173 | xi | Limestone at, analyses..... | 90, 91 B | xiii |
| lake, NEW KLONDIKE DIST., | | | character..... | 14 A | xiii |
| R. R. D. See Kawashegamuk |  |  | ..... | 24 B | xiii |
| lake. | | | Quarry Co. | | |
| lake, OLDEN TP., FRONTENAC CO. | | | Capital and date of charter..... | 11 | xi |
| Serpentine on..... | 54 A | xiii | Officers of..... | 91 B | xiii |
| lake, PONTIAC CO., QUE. See | | | Stone producing, 1902..... | 28 | xij |
| Opasatika lake, Que. | | | Longnecker, G. A. | | |
| Lake Gold Mg. Co. | | | Calabogie iron mine purchased | | |
| Capital and date of charter..... | 38 A | xiii | by..... | 191 | iii |
| Gold mining by, New Klondike | | | Iron mining by, near Madoc.... | 97 | vii |
| dist..... | 256 | xi | ..... | 103 | ix |
| Lake House, LONG LAKE, N. | | | Longueuil tp., PRESCOTT CO. | | |
| OF L. SUPERIOR. | | | Limestone quarries in..... | 98, 99 B | xiii |
| Cereals grown at..... | 112 | iv | Longwell claim, COBALT. See Deni- | | |
| Lake P. O., OLDEN TP., FRON- | | | son claim. | | |
| TENAC CO. | | | Longyear, E. J. | 231 | v |
| Zinc mining near..... | 25 | xii | Lonicera caerulea. | | |
| See also Richardson zinc mine. | | | Abitibi Lake dist..... | 241 A | xiv |
| Lake river, THE NEW KLON- | | | Mattagami valley..... | 150 A | xv |
| DIKE, R. R. D. | | | <i>ciliata.</i> | | |
| Gold mining near. See Tabor | | | Mattagami valley..... | 150 A | xv |
| and Stevenson's mine. | | | <i>hirsuta.</i> | | |
| pt., LAC DES MILLE LACS, | | | Mattagami valley..... | 150 A | xv |
| TH. B. D. | | | <i>involuta.</i> See Honeysuckle. | | |
| Sand beach at..... | 135 | v | <i>oblongifolia.</i> | | |
| pt., L. ERIE. | | | Abitibi Lake dist..... | 241 A | xiv |
| Erie clay west of..... | 10 B | xv | Mattagami valley..... | 150 A | xv |
| pt., L. OF THE WOODS, R. R. D. | | | Looking glasses. See Mirrors. | | |
| Feldspar in greenstone near..... | 115 | vii | Lookout mt., TENNESSEE..... | 95 A | xiv |
| Point island, L. OF THE WOODS, | | | Loomis-Pettibone gas generator. | 228 | xi |
| R. R. D. | | | Loon (GREAT NORTHERN DIVER). | | |
| H. B. C. post on..... | 185 | v | Abitibi river, south of..... | 189 | xii |
| Minor ref. to..... | 181 | v | ..... | 126 A | xiii |
| lake, S. OF SHEBANDOWAN | | | Little Abitibi lake..... | 188 | viii |
| LAKE, TH. B. D. | 81, 127 | v | lake, ANGLESEA TP., ADDING- | | |
| portage, ABITIBI RIVER. | | | TON CO. | | |
| Coal near, analysis..... | 175 A | xiii | Rocks on..... | 201, 202 | xi |
| Rocks at and near..... | 138, 142, 143 A | xiii | (? COON) lake, BURLEIGH TP., | | |
| carbonaceous shales..... | 159 A | xiii | PETERBORO CO. | | |
| coal measures..... | 169 A | xiii | Rocks on..... | 213 | viii |
| portage, MATTAGAMI RIVER. | | | lake, CHANDOS TP., PETERBORO | | |
| Corniferous formation near..... | 47 | R C | CO. | | |
| Ochres between, and Grand river. | 128 | iv | Gold prospecting near..... | 215 | viii |
| portage, MICHIPICOTEN RIVER, | | | lake, DEROCHÉ AND JARVIS TFS., | | |
| ALG. | | | ALG. | | |
| Description of river near..... | 192 | vii | Iron ore near, mining..... | 58 A | xiii |
| Length of..... | 5 Bull. | iii | See also Breitung Iron Co. | | |
| portage, MISSINAIBI RIVER, ALG. | | | Loon Lake iron mine. | | |
| Lignite near..... | 125 | iv | lake, MCTAVISH TP., TH. B. D. | | |
| Minor ref. to..... | 194 | viii | See also Animikie iron range. | | |
| portage, NIPIGON RIVER, TH. B. D. | | | Iron ore on..... | 144 | R C |
| Moraine at..... | 107 A | xvi | ..... | 65 | ii |
| Portage falls, MISSINAIBI RIVER, | | | boring for..... | 310 | xii |
| ALG. |  |  | ..... | 8 A | xiii |
| rapid, MAGPIE RIVER. See Ka- |  |  | ..... | 12, 29, 44 A | xiv |
| betachewan rapid. |  |  | ..... | 27 A | xv |
| rapid, RAINY RIVER, R. R. D., | 167 | v | results of concentrating | | |
| Sault rapid, ABITIBI RIVER | | | experiments on..... | 172 A | xv |
| Character of river near..... | 186 A | xiv | Rocks on and near..... | 168-170 A | xv |
| Notes on, by Parks..... | 182 | viii | granite, notes..... | 162 A | xv |
| Photo of..... | 184, 185 | viii | notes by Committee on Pre- | | |
| Longchamps, Oliver..... | 29 | ix | Cambrian nomenclature. 273 A | xiv | |
| | | | report by W. N. Smith. 254-260 A | xiv | |

| | Page. | Vol. |
|--|-------------|------|
| Loon Lake (BREITUNG) iron mine, DEROCHÉ AND JARVIS TPS., ALG. | | |
| Accident at..... | 40 A | xiii |
| Work in, 1903..... | 75, 76 A | xiii |
| 1905..... | 14, 71 A | xv |
| Lake Iron Co. | | |
| Capital and date of charter..... | 37 A | xiii |
| Lease of, expires..... | 71 A | xv |
| Work by, 1903..... | 75, 76 A | xiii |
| portage, MATTAGAMI RIVER, ALG. | | |
| Description of river near..... | 121 A | xv |
| Laurentian rocks at..... | 131 A | xv |
| Tourmaline schist at..... | 134 A | xv |
| station, McTAVISH TP., TH. B. D. | | |
| Boring at, for iron..... | 73 A | xiii |
| Rocks near..... | 159, 168 A | xv |
| Loonskin lake, MICHIGOTEN DIV. | | |
| Character and length of..... | 158 | ix |
| Gold prospecting near..... | 173 | xi |
| Minor ref. to..... | 154 | xi |
| Rocks on and near..... | 158 | ix |
| iron bearing..... | 161 | xi |
| Striae on island in..... | 204 A | xv |
| 178 | ix | |
| Loper, J. H. | 142 | x |
| Lord, A. D. | 60 | ix |
| L'Original, LONGUEUIL TP., PRESCOTT CO. | | |
| Clay covered country west of.... | 98 B | xiii |
| Limestone quarries near..... | 98, 99 B | xiii |
| Lorimer lake, HAGREMAN TP., P. S. D. | | |
| Limestone on..... | 93 B | xiii |
| Loring, WILSON TP., P. S. D. | | |
| Copper and iron near..... | 262 | viii |
| 170, 171 | ix | |
| Country south of, character..... | 169 | ix |
| Rocks near, gabbro, containing hypersthene..... | 296 | xii |
| petrography..... | 182 | ix |
| Lorne, Marquis of | 220 | i |
| iron claim, NEAR McDougall LAKE, ALG. | | |
| Notes on, by J. M. Bell.... | 337, 338 A | xiv |
| Rocks near..... | 316 A | xiv |
| tp., ALG. | | |
| Nickel in..... | 145 C | xiv |
| prospecting for..... | 233 | i |
| Lorrain Mining Co. | | |
| Capital and date of charter..... | 30 A | xvi |
| tp., NIP. | | |
| Rocks in..... | 6, 41, 46 B | xiv |
| photo..... | 47 B | xiv |
| Silver prospecting in..... | 7 A | xv |
| Lorraine (HUDSON RIVER) formation. | | |
| Analysis of, from various local- ities..... | 7 B | xv |
| As brick-clay, analysis and notes. 101, 104, 105 | i | |
| 126-128 | iii | |
| Caledonia..... | 252 | iv |
| Compared with Ohio shales.... | 119 | iii |
| Composition and thickness of.... | 97 A | xiv |
| Don, for brick-making..... | 5, 7 B | xv |
| Fire-clay in..... | 118 | iii |
| Mimico, thickness..... | 139 | i |
| Notes on, by Bell..... | 43 | R C |
| Oil-fields, thickness of..... | 96 A | xiv |

Lorraine formation.- Con.

| | | |
|--|------------|------|
| Toronto..... | 4 | i |
| for brick making. 5, 110, 114 B | xv | |
| Losie, T. | 104 | vii |
| Lost lake, N. OF VERMILION LAKE, R. R. D. | | |
| Gneiss on..... | 169, 172 | vii |
| Vegetables grown on..... | 182 | vii |
| lake, N. OF L. SUPERIOR, TH. B. D. | | |
| Fertile land and forest near..... | 296 A | xiv |
| High hills north of..... | 281 A | xiv |
| Iron ore near..... | 316, 336 A | xiv |
| appearance favourable..... | 339 A | xiv |
| Rocks near..... | 349 A | xiv |
| Lost-end lake, ROBERTS TP. | 224 A | xiii |
| Lot (OF TOWNSHIP.) | | |
| Explanation of..... | 218 | vii |
| Lotbiniere co., QUE. | | |
| Anthraxolite in..... | 5 Bull. | i |
| Loucks, F. M. | 104 | vii |
| Louck's mill, CASTOR RIVER. | | |
| Limestone at, analysis..... | 108, 109 B | xiii |
| Loughborough lake, FRONTENAC CO. | | |
| Limestone on, fossiliferous..... | 44 B | xiii |
| Marl in..... | 16 B | xiii |
| 121 A | xiv | |
| Mining Co. | | |
| Capital and date of charter..... | 25 A | xv |
| Halan, Canton and Lacey mica mines worked by..... | 86-88 A | xvi |
| Work by, 1906..... | 22, 23 A | xvi |
| tp., FRONTENAC CO. | | |
| Apatite in..... | 149 | R C |
| 194 | ix | |
| character..... | 441 | R C |
| mining..... | 168 | R C |
| evidence before R. C. 170, 171, 176-178 | R C | |
| <i>See also Johnson m.</i> | | |
| with amber..... | 245 | i |
| pyroxene..... | 53 | R C |
| Calcite in..... | 195 | ix |
| Dalolite in..... | 194 | ii |
| 197 | ix | |
| Feldspar mining in..... | 138 | xii |
| Graphite in..... | 199 | ix |
| Iron ore from, shown at World's Fair..... | 81 | ii |
| Iron pyrites mining in..... | 163 A | xvi |
| Lead in..... | 198 | ix |
| mining..... | 145, 146 | R C |
| 234 | vii | |
| 94 A | xiii | |
| <i>See also Frontenac lead m.</i> | | |
| Limestone in..... | 47 | ii |
| analysis..... | 45 B | xiii |
| fossiliferous..... | 44 B | xiii |
| Mica in..... | 170 | R C |
| 203 | ix | |
| mining in..... | 98 | vii |
| 133-135 | x | |
| 126 | xii | |
| 91, 92 A | xiii | |
| 85 A | xiv | |
| 103 A | xv | |
| evidence before R. C.... | 148, 149 | R C |
| notes, 1892..... | 249, 250 | ii |
| 1906 and photo..... | 89, 90 A | xvi |

| | Page. | Vol. | | Page. | Vol. |
|---|----------|--------|--|----------|--------|
| Loughborough lake. — <i>Con.</i> | | | Lower Island portage, MATTAGAMI RIVER, ONT. | | |
| Mica mining in. — <i>Con.</i> | | | Iron pyrites on | 181 | A XVI |
| <i>See also</i> Bear Lake m. | | | Marquette series. <i>See</i> Algonkian. | | |
| McClatchey m. | | | Neepawa gold mine. <i>See</i> Royal Sovereign mine. | | |
| Smith and Lacey m. | | | Nipigon formation. <i>See</i> Animikie. | | |
| Sydenham. | | | Onaping lake. <i>See</i> Onaping lakes. | | |
| Rocks in..... | 288 | xii | Slate Conglomerate formation. | | |
| Veins in, banded structure of.... | 439 | RC | Notes on, by Coleman..... | 160 | viii |
| Lougheed, A. | | | Palladian islands, photo.... | 136, 137 | viii |
| Gold mining by, Seine River dist. | 159 | V | Lowndes, Henry | 225 | i |
| <i>Lonicera ciliata.</i> | | | Lowry, H. | 78 | xii |
| Abitibi Lake dist..... | 241 | A xiv | | 74, 75 | viii |
| <i>sullivanti.</i> | | | <i>See also</i> next ref. | | |
| Abitibi Lake dist..... | 241 | A xiv | gold mine, THE NEW KLONDIKE, R.R.D. | 42 | viii |
| Louis (INDIAN). | 195 | vii | <i>Loromema rob. sta.</i> | | |
| Louisa pyrites mine, VA. | | | Kwataboahagan river..... | 186 | A xiii |
| Lenses in, thickness of..... | 192 | A xvi | photo of sections..... | 192 | A xiii |
| Louise Mining Co. | | | <i>" subalternata.</i> | | |
| Capital and date of charter..... | 25 | A xv | Kwataboahagan river..... | 186 | A xiii |
| Louisiana Exposition. | | | Loyada lake, LEEDS CO. | | |
| Cobalt ores exhibited at..... | 16 | B xiv | Calcareous formation on..... | 72 | B xiii |
| Louisville, U.S. | | | Lucan, BIDDULPH TP., MIDDLESEX CO. | | |
| Brick payment in..... | 108 | iii | Morainic hills and clay land near. | 153 | xii |
| Lount, G. F. | 124 | viii | Lucas, John. | 108 | ix |
| | 112 | B xiii | | 122 | xi |
| tp., P. S. D. | | | | 32 | xii |
| Iron mining in..... | 50-53 | xii | <i>Lucina elliptica.</i> | | |
| <i>See also</i> Magnetawan iron mine. | | | St. Marys..... | 151 | xii |
| Limestone in..... | 94 | B xiii | | 96 | B xiii |
| Louse, Scurfy Bark | | | Lucinda gold mine, FENWICK TP. | | |
| Abitibi dist..... | 129 | A xiii | Notes on, 1904..... | 59 | A xiv |
| Louth tp., LINCOLN CO. | | | Gold Mg. Co. | | |
| Boring in, for gas and oil, log.... | 112 | A xv | Capital and date of charter..... | 37 | A xiii |
| <i>See also</i> St. Catharines. | | | Work by, Fenwick tp., 1904.... | 59 | A xiv |
| Iroquois beach in. — <i>See</i> Jordan. | | | Luckow, Albert. | 167, 172 | iii |
| Lovejoy, Dr. | 43 | ix | Lucky Coon (HILLYER) gold mine, | | |
| Lover's leap, MACKINAC ISLAND. | | | BAD VERMILION L., R.R.D. | | |
| L. HURON, U.S. | 109 | V | Capital and officers of..... | 70 | ix |
| Lovett and Finney. | | | Depth of, 1894..... | 230 | iv |
| Process of, for concentrating iron ores..... | 106 | ii | 1899..... | 35 | ix |
| Low, Dr. A. P. | | | Granite in..... | 116 | vi |
| Acknowledgments to..... | 105 | A xvi | Idle, 1896..... | 81, 260 | vi |
| Analysis of anthraxolite collected by..... | 162 | vi | 1897..... | 75 | vii |
| Coal found by, in Lab..... | 126 | iv | 1898..... | 277, 281 | viii |
| Jaspers ores noted by, Lab. 202. | 204 | x | Mill erected at..... | 25 | iv |
| Notes by, on mouths of Albany and Moose rivers..... | 129, 130 | iv | Notes on..... | 5 Bull. | i |
| Ref. to surveys by, Mistassini dist., Que. | 159 | A xv | | 57 | iv |
| Severn river, | | | | 273 | viii |
| Kee.... | 93 | v | | 70 | ix |
| Views of, <i>re</i> Laurentian in Lab. | 159 | vii | by Blue..... | 155-157 | v |
| Low Phosphorous Ore Properties Co. | | | Coleman..... | 65 | v |
| Capital and date of charter..... | 10 | vii | Shut down, 1900..... | 84. | x |
| Lowdermilk, H. W. | 173 | C xiv | Lucy blast furnaces, PITTSBURG. | | |
| Lowe, J. | | | Labour employed by, statistics.. | 369 | RC |
| Brick-yard of, near Meaford..... | 65 | B xv | Ludlow, S. H. | 152 | A xiv |
| Lowell, MIDDLESEX CO., MASS. | | | Lumbering. | | |
| Waterpower at..... | 485 | RC | Batchawana bay..... | 203 | viii |
| Lower Helderberg formation. | | | Quinze lake, Que..... | 227 | xi |
| Composition of..... | 98 | A xiv | Seats of, in Ontario..... | 119 | iv |
| Eastern Ontario, notes by Parks. | | | Whiskey Lake region, Alg..... | 63 | A xiv |
| | 152-154 | xii | Lumby, F. A. | 110 | ix |
| Hagersville (near)..... | 145, 146 | xii | | | |
| Occurrences and thickness..... | 24, 25 | B xiii | | | |
| Petroleum, thickness..... | 96 | A xiv | | | |

| | Page. | Vol. | | Page. | Vol. |
|---|----------|--------|--|------------|--------|
| Ludwigshafen, BAVARIA, GERMANY | | | Lyn, ELIZABETHTOWN TP., LEEDS CO. | | |
| Pyrites smelting at..... | 195 | A xvi | Ancient width of strait at..... | 243 | A xiii |
| Lulea, LAN OF NORRIBOTTEN, SWEDEN. | | | Clay at, stratified..... | 241 | A xii |
| Concentrating works at..... | 341 | xii | Marine deposits near..... | 220, 221 | x |
| Wenstrom separator used at..... | 328 | xii | Lynch, D. | 48 | A xii |
| Lumsden Mining Co. | | | F. B. | 74 | A xiii |
| Capital and date of charter..... | 20 | A xvi | J. A. | 142 | x |
| tp., ALG. | | | John | 140 | i |
| Rocks in, nickel-eruptive..... | 201 | A xiii | Lyndhurst (FURNACE FALLS), LANS- | | |
| 71 c xiv | | | DOWNE TP., LEEDS CO. | | |
| sandstone..... | 100 | c xiv | Iron furnace at..... | 319 | R C |
| Lunan, W. A. | 104, 187 | vii | 34 | | ii |
| Lund lake, MICHIGICOTEN DIVISION, | | | Lyndoch tp., RENTFREW CO. | | |
| ALG. | 287, 293 | A xiv | Amazonite in..... | 193 | ix |
| Lundergaard Mose, DENMARK. | | | Beryl in..... | 195 | ix |
| Peat works at..... | 211 | ii | crystals, photo..... | Facing 222 | vii |
| Lunn, L. E. | 139, 142 | x | notes by Miller..... | 234-236 | vii |
| 47 | A xiii | | Bismite in..... | 195 | ix |
| See also Continuity claim. | | | Bismuthinite in..... | 234 | vii |
| Lury, J. S. de | | | 195 | ix | |
| Analysis by, of cobaltite from | | | Boulders in, Silurian..... | 213 | vii |
| Cobalt..... | 23 | B xiv | Columbite in..... | 197 | ix |
| Luther Manufacturing Co. | 481 | R C | with tin..... | 211 | ix |
| Lutterworth tp., HALIBURTON CO. | | | Corundum in, notes by Miller, 212, 223 | 221 | viii |
| Iron ore in, analysis..... | 202 | ix | X-ray photos in..... | 216, 217 | viii |
| boring for..... | 52 | x | Nepheline syenite in..... | 226, 229 | vii |
| exhibited at World's | | | Samaraskite in..... | 208 | ix |
| Fair..... | 79 | ii | Lynx. | | |
| See also Paxton m. | | | Abitibi dist..... | 127 | A xiii |
| Minerals in, notes on..... | 57 | B xiii | 242 | A xiv | |
| Rocks in, Grenville series..... | 56 | B xiii | decrease of..... | 186 | viii |
| Luttrell, —? | 164, 165 | v | Hinterland, The..... | 133 | iv |
| Luxenburg. | | | Nipigon Lake reg., reported..... | 139 | A xvi |
| Steel production of, 1890..... | 91 | ii | Niven's base line, Alg., and S. of | 142 | ix |
| 1892..... | 122 | ii | Windigoostigwan lake..... | 137 | v |
| Lybster tp., TH. B. D. | | | Lynxhead falls, SEINE RIVER, R. R. D. | | |
| Argentite in..... | 194 | ix | Gold prospecting at..... | 76 | vi |
| Silver mining in..... | 201 | R C | 132 | vii | |
| 23 | viii | | Lyon, R. A. | 200 | vi |
| See also East End mine. | | | mt., U. S. | | |
| Lycopodium. | | | Iron smelting at..... | 477 | R C |
| Abitibi dist..... | 218 | A xiv | Lyons, FRANCE. | | |
| <i>Lycopodium anadolium.</i> | | | Peat near, for burning..... | 212 | ii |
| Abitibi Lake dist..... | 242 | A xiv | <i>Lycopodium dardanus.</i> | | |
| " <i>complanatum.</i> | | | Kwatiboahegan river..... | 188 | A xiii |
| Abitibi Lake dist..... | 242 | A xiv | <i>Lysinechus stricta.</i> | | |
| <i>Lycopodium sinuatus.</i> | | | Mattagami valley..... | 151 | A xv |
| Mattagami valley..... | 151 | A xv | " <i>thysitoides.</i> | | |
| Lydian stone. | | | Mattagami valley..... | 150 | A xv |
| Compared with Keweenawan | | | | | |
| eruptives..... | 171 | viii | | | |
| Description of..... | 537 | R C | | | |
| Lyell, Sir Charles | | | | | |
| Term Eocene introduced by..... | 533 | R C | | | |
| Hypogene proposed by..... | 536 | R C | | | |
| Visit of, to Canada, 1812..... | 225 | A xiii | | | |
| island, BRUCE CO. | | | | | |
| Limestone on, dolomite..... | 37 | B xiii | | | |
| Niagara..... | 50 | B xiii | | | |
| Lyla gold mine, MICHIGICOTEN DIV., | | | | | |
| ALG. | 113 | ix | | | |
| Lyle and MacCance. | | | | | |
| gold mine, DRYWEED ISLAND, | 119 | ii | | | |
| RAINY LAKE, MINN. | | | | | |
| Idle, 1895..... | 161 | v | | | |
| Notes on, by Coleman..... | 63 | v | | | |
| Lyman, A. | 40, 41 | A xiii | | | |

| | Page. | Vol. | | Page. | Vol. |
|--|----------|-------|--|---------------|--------|
| Maberly, S. SHERBROOKE TP., LAN- ARK CO. | | | McArthur-forest process. See Cy- aniding. | | |
| Miner prospecting near | 103 | A XV | mine, No. 1, COPPER CLIFF, Nip. | | |
| Mac Mining Co. | | | Accident at | 25 | viii |
| Exhibits of, at Buffalo | 25 | A XV | ..... | 25 | ix |
| Macadam roads. | | | Discovery of | 169 | c xiv |
| Demerits of, in cities | 104, 105 | iii | Minor refs. to | 285 | xii |
| McA 28, 141 gold loc. See Victory gold mine. | | | Notes on, 1899 | 96 | ix |
| 46 gold loc. See Queen gold mine. | | | idle | 122 | x |
| 51 gold loc. See Standard gold mine. | | | 1901 | 277 | xi |
| 56, 129, 130, 134, 148, 189, 190 gold locs. See Triggs gold mine. | | | Photo of | 272, 273 | xii |
| 288 gold loc. See Northern Lights Mines Co. | | | mine, No. 2, COPPER CLIFF, Nip. | | |
| copper loc. See Black Bay Mg. Co. | | | Accident at | 24 | ix |
| McAllister, Capt. James. | 107 | v | ..... | 45 | xii |
| W. B. | | | Minor ref. | 285 | xii |
| Prospecting by, Sudbury dist. 169, 170 | c xiv | | Notes on, 1899 | 97 | ix |
| McAlvay, A. V. | 256 | xi | 1900 | 122 | x |
| ..... | 85 | xii | 1901 | 277 | xi |
| Macaming (or Sorel) lake, SOUTH- WEST OF MATTAGAMI LAKE, ALG. | 130 | ix | 1902 | 119 | xii |
| McAree, John A. | | | Photo of | 272, 273 | xii |
| Creighton tp. surveyed by | 135 | c xiv | Macaulay, Andrew. | 150, 163, 164 | viii |
| Engineer, Pritchard copper m. | 86 | ix | tp., MUSKOKA DIST. | | |
| Sentinel g. m. | 64 | viii | Brick works in. See Bracebridge. | | |
| Gold mining by, Aubrey tp. | 95 | x | Macauley, James. | 30 | ix |
| prospecting by, L. Nipissing. 237 | ii | | McBain, — ?. | 81 | vii |
| History by, of the tin "salting" in Michipicoten div. | 138, 139 | viii | Macbeth, S. STE. MARIE DIST., ALG. | | |
| Ref. to surveys by, Hastings dist. 39 | iv | | Copper at | 60 | R C |
| R.R.D. | 36 | iv | McBride, Robert | | |
| McArthur, Alexander | 237 | ii | Foreman, Elsie mine | 282 | xi |
| ..... | 40 | iii | Mount Nickel m. | 254 | xii |
| Henry | 55, 56 | xii | Manager, Blezard m. | 247, 255, 256 | ii |
| J. S. |  |  | ..... | 286 | xii |
| Of McArthur-forest process. See Cyaniding. |  |  | ..... | 56 | c xiv |
| James | | | Cameron m. | 273 | v |
| Assistant to Dr. Peters. | 139 | c xiv | Worthington m. | 246 | iv |
| Estimate by, of Sudbury mining costs | 180-182 | c xiv | ..... | 273 | v |
| Evidence by, re accident. | 212, 213 | iv | Red Rock mine, Bucke tp., own- ed by | 87 | A XV |
| Inventor of nickel-refining pro- cess. | 24 | iv | Statement by, re Blezard m. | 142 | c xiv |
| Manager, Canadian Copper Co's smelter | 220 | iv | Sheppard m. | 60 | c xiv |
| ..... | 123 | x | McCadden, H. | 289 | xi |
| ..... | 64 | xi | McCall, Alfred | | |
| ..... | 117 | xii | Accident to | 117 | vii |
| ..... | 140 | c xiv | Work by, 1897 | 116, 126 | vii |
| Copper Cliff mine. | 182 | iii | McCall, James T. See Drummond, McCall & Co. | | |
| ..... | 243 | iv | McCamus, Thomas | | |
| ..... | 267 | v | Work by, 1904 | 266 | A xiv |
| ..... | 68 | vi | McCandless, A. | 66 | xii |
| ..... | 285 | xii | McCann tp., Nip. | | |
| Paper by, on metallurgy at Cop- per Cliff. | 299-303 | xii | Report on, by Workman. | 248-253 | A xiv |
| Photo of | 137 | c xiv | McCannell, J. S. | | |
| John | | | Brick-making by, Milton | 68 | B XV |
| Letter by, re accident to Bouehard. 169 | iii | | McCarthy, — ?. | 230, 237, 240 | v |
| Peter | 90 | ix | John | 45 | x |
| T. A. | | | Thomas | 160 | A xiv |
| Recorder, Coleman Mg. div. | 36 | A xvi | McCaslin, J. J. | 104 | viii |
| Report by, on same. | 38 | A xvi | McCaul wharf, OTTAWA RIVER. | | |
| | | | Cambro-Silurian near. | 108 | B xiii |
| | | | McCharles, Aeneas | | |
| | | | Evidence by, before R.C. re:— | | |
| | | | gold and silver, Sault Ste. Marie | 60 | R C |
| | | | dist. | 308 | R C |
| | | | mining laws. | 231 | R C |
| | | | tariffs | 425 | R C |
| | | | technical instruction. | 86 | A xiii |
| | | | Owner, North Star mine. | 10 | A xiv |

| | Page. | Vol. | | Page. | Vol. |
|---|----------|--------|--|---------------|--------|
| McCharles, Aeneas—Can. | | | McCormick, Eugene | 42 | B xiii |
| <i>See also</i> North Star mine. | | | Cobalt Silver Mfg. Co. | | |
| nickel mine. <i>See</i> North Star | | | Capital and date of charter..... | 25 | A xv |
| mine. | | | McCorquodale, —? | | |
| McClarty, N. | | | Estimate by, <i>re</i> iron producing. | | |
| Brick-yard of, Benmiller..... | 70 | B xv | Snowdon tp..... | 336 | R C |
| McClatchey and Hayden. | | | Notes by, on cost of charcoal iron. | 395 | R C |
| <i>See also</i> McClatchey mica mine. | | | McCort, Dr. Thomas J. | 220 | iv |
| Mica mine of, Loughboro tp..... | 135 | x | tp., Nip. | | |
| sold..... | 288 | xi | Minor ref. to..... | 195 | A xiv |
| sold..... | 127 | xii | Soil in..... | 227 | A xiv |
| mica mine, LOUGHBORO TP., | | | peat bog..... | 198 | A xiv |
| FRONTENAC CO. | | | requires drainage..... | 207 | A xiv |
| Notes on, 1901..... | 288 | xi | sandy area..... | 197 | A xiv |
| 1902..... | 127 | xii | Trees in..... | 227 | A xiv |
| Producing, 1903..... | 12 | A xiii | McCosh, Donald J. | 44 | A xv |
| McCloud, Sandy | | | McCoy, G. | 105 | vii |
| Copper mining on land of. <i>See</i> | | | McCraney, D. | 23 | vi |
| Rock Lake copper mine. | | | McCright, Wilson | | |
| McColl, Archibald. | 228 | vii | Data by, <i>re</i> oil in Kent co..... | 96-98 | A xvi |
| McConkey tp., P.S.D. | | | McCrimmon, Dan | 110 | xii |
| Iron, copper pyrites and pyrrhot- | | | McCrindle lake, ROBERTS TP., ALG. | | |
| ite in..... | 170, | ix | Iron ore on..... | 223, 224 | A xiii |
| | 262 | viii | McCrone, Mrs. | 149 | xii |
| McConnell, Rinaldo | | | | 116 | B xiii |
| <i>See also</i> McConnell iron claim. | | | McCuan, J. D. | | |
| Vermilion mine. | | | Manager, Big Jim and Dacre iron | | |
| Boring by, for iron, Loon lake.. | 73 | A xiii | mines..... | 113 | xii |
| | 254 | A xiv | Manager, Radnor iron mine.... | 259 | xi |
| Gold prospecting by, Wanapitei | | | | 47 | xii |
| lake..... | 4 | iv | | 37, 77 | A xiv |
| Govt. drill lent to..... | 50 | xii | | 95 | A xv |
| Graphite mining by:— | | | McCue, W. | 117 | ix |
| Brougham tp..... | 22, 86 | A xiv | | 142 | x |
| McCue..... | 26 | xii | | 74 | xi |
| | 23 | A xv | McCue, (OLIVER FERRY,) N. ELMS- | | |
| <i>See also</i> McCue. | | | LEY TP., LANARK CO. | | |
| Iron prospecting by, Animikie | | | Graphite in..... | 181 | R C |
| range..... | 156 | A xv | | 196 | iii |
| Managing Director, Crystal m.... | 262 | v | boring for..... | 59 | xi |
| | 267, 268 | vi | | 26, 50, 53 | xii |
| | 139 | vii | mine closed down..... | 93 | A xiii |
| President, Silver Bar Mfg. Co.... | 86 | A xv | | 22 | A xiv |
| Sudbury locations owned by..... | 170 | C xiv | | 106 | A xv |
| <i>See also</i> Vermilion m. | | | | 123 | xii |
| McConnell creek, SELWYN LAKE, | | | | 190 | ix |
| NORMAN TP., NIP. | | | | 27 | xi |
| Nickel mining near. <i>See</i> Whistle | | | | 12 | A xiii |
| nickel mine. | | | | 35 | vi |
| graphite mine. <i>See</i> MacCue. | | | | 134, 135 | xii |
| iron claim, ANIMIKIE RANGE. | | | | 23 | A xv |
| Th. B. D. | | | | 87 | A xiv |
| Photo of tunnel-mouth. | 43, 44 | A xiv | | 194, 195 | iii |
| nickel mine. <i>See</i> Vermilion | | | | 31 | vii |
| mine. | | | McCullagh, John. | | |
| McConway, Torley & Co. | 119 | ii | McCullough, Datzell & Co. | 119 | ii |
| McCool lake, N. OF L. HURON, ALG. | | | McCullum—? | 160 | v |
| Copper claims near..... | 98 | xii | Manseff. | 105 | A xiv |
| veins on..... | 67, 70 | A xiv | McDermid, Walter | | |
| photo..... | 66 | A xiv | As ay by, of quartz from near | | |
| McCormack, John | | | Heron bay..... | 29 | R C |
| Limestone quarrying by, Pelee | | | McDermott, Walter | | |
| island..... | 42 | B xiii | Description by, of Frue Vanners. | 131 | vi |
| Roberts | | | Notes by, on Huronian mine ... | 77 | v |
| Evidence by, before Roy. Com. | | | MacDiarmid, tp. ALG. | | |
| <i>re</i> :— | | | Soil in..... | 127 | A xv |
| copper, Sudbury dist..... | 105 | R C | and timber..... | 119, 120, 141 | A xv |
| gold, Snider tp..... | 112 | R C | | | |
| prospector's rights..... | 310, 426 | R C | | | |

| | Page. | Vol. | | Page. | Vol. |
|---|---------------|--------|--|--------------------|--------|
| McDonald, A. A. | | | McDonald tp., ALG. | | |
| Evidence by, <i>re</i> marble, Hastings co. | 80 | R C | Farming industry in. <i>See</i> Echo Bay. | | |
| A. E. | 61 | B xiii | Iron ore in. | 143 | R C |
| A. R. | 75 | vi | Macdonell, Dr. Allan Scott. | 238 | v |
| Evidence by, before Royal Com., <i>re</i> marble. | 82 | R C | A. McLean. | 23 | xii |
| ref. to. | 102, 103 | B xiii | A. R. | 54 | A xvi |
| Allan | | | McDonell, Allan. | 87 | A xiv |
| Foreman, Crystal gold mine. | 262 | v | D. | 135 | xii |
| University silver mine. | 267 | vi | Sir H. G. | | |
| Manager, McKinley and Darragh mine. | 53 | A xvi | Consular report by, on peat in Denmark. | 211, 212 | ii |
| Shaft contractor, Bath Island m. | 79 | A xv | Macdonnell, G. M. | 178 | iii |
| Gray Eagle m. | 40 | vii | mine, DENISON TP., ALG. | | |
| Angus, (1850) | 59 | vii | Minerals in, notes by Ricketts and Banks. | 179, 180 | ii |
| Angus, (1903) | 175 | ii | McDougall, George. | 238 | ii |
| C. J. | 80 | A xiii | McDougall, William. | 238 | ii |
| D. | 104 | viii | McDougall, George. <i>See</i> McDougall, John & Co. | | |
| D. F. | 101 | R C | J. | 74 | xi |
| Acknowledgments to. | 94 | B xiii | John | 66 | xii |
| Notes by, on forest fires, Algoma. | 206 | v | Views of, on peat for iron smelting. | 207 | i |
| Timber estimator. | 165-167 | xii | L. | 117 | ix |
| Duncan | 255, 257 | ii | .... | 142 | x |
| Hon. Hugh John. | 99 | x | .... | 74 | xi |
| James | 214 | v | .... | 66 | xii |
| John |  |  | .... | 48 | A xiii |
| Oil refining by, Enniskillen tp. | 161 | R C | W. H. | | |
| President, National Oil Co. | 26, 27 | v | Acknowledgments. | 135, 139 | viii |
| Sir John A. |  |  | .... | 299 | A xiv |
| In connexion with nickel-steel in Canada. | 171, 174, 175 | C xiv | Iron and gold mining by, Michipicoten div. | 104, 135, 139, 141 | viii |
| Macdonald, M. | 105 | vii | .... | 107, 160, 161 | ix |
| .... | 142 | x | .... | 142 | x |
| McDonald, M. T. | 101 | xii | .... | 74 | xi |
| Macdonald, R. H. | 79 | A xiii | .... | 66 | xii |
| Tom |  |  | .... | 48 | A xiii |
| Work by, 1896. | 96, 71, 104 | vi | John & Co. | | |
| 1897. | 110 | vii | Bounty payments to. | 32 | x |
| Walter | 79 | x | St. Francis furnace worked by. | 27 | ii |
| McDonald, William. 167, 175, 176, 182 | | iii | St. Maurice " " | 24 | ii |
| & Co. | | | cape, IRON LAKE, MICHIPICOTEN DIV., ALG. | | |
| Brick-yard of, Canfield. | 66 | B xv | Iron deposit on. | 313, 317, 318 | A xiv |
| R. and Son. | | | Jaspilite on. | 320 | A xiv |
| Marble quarry of, Arnprior. | 102 | B xiii | Rocks on. | 354 | A xiv |
| camp, NEAR KETTLE LAKE, FALCONBRIDGE TP., ALG. | | | chert, analysis. | 309, 310 | A xiv |
| Photo of lake near. | 102 | C xiv | cherty siderites. | 319 | A xiv |
| Macdonald copper mine, FOLEY TP., P. S. D. | | | Chute station, TIMISKAMING AND NOR. ONT. R'Y., NIP. | | |
| Notes on, by Coleman. | 168 | ix | clearing, BLACK RIVER, ABITIBI RIVER. | | |
| McDonald corner, LANARK CO. | | | Vegetables grown at. | 253 | A xiv |
| Summer mining classes at, 1896. | 197 | vi | lake, N. OF HOMER TP., TH. B. D. | | |
| creek, RABBIT LAKE, TIMAGAMIC DIST., NIP. | | | Iron near. | 316 | A xiv |
| Jaspilite near. | 167 | x | mining. <i>See</i> Lorne. | | |
| Macdonald Institute, GUELPH. | | | Rocks on. | 305, 338 | A xiv |
| (LITTLE MANITOUC) island, L. NIPISSING. | | | tp., PARRY SOUND DIST. | | |
| Notes on, by Barlow. | 84 | B xiii | Copper mining in. | 100, 168, 169 | ix |
| mills, RIGAUD RIVER. |  |  | .... | 116 | xii |
| Limestone at. | 99 | B xiii | Limestone in. | 93, 94 | B xiii |
| nickel mine. <i>See</i> Lady Macdonald mine. | | | Mica mining in. | 279, 280 | v |
| McDonald quarry, GUELPH. | | | <i>See also</i> Valentine mica mine. | | |
| Limestone of, quality. | 122 | B xiii | McDowell, F. H. | | |
| | | | Ref. to work by, on treatment of magnetic ores. | 338, 340 | xii |

| | Page. | Vol. | | Page. | Vol. |
|--|--------------|------|--|------------|------|
| McEachern, Duncan | | | McGill, Hon. Peter | | |
| Views of, <i>re</i> prospector's rights, . . . | 313 | R C | Director, Marmora Foundry Co. . . . | 321, 322 | R C |
| Pete | 44 | x | 15-21 | ii | |
| McEdwards, George | 264 | vi | Member of Montreal Mg. Co. . . . | 127 | vi |
| McElevey, P. H. | 104 | viii | University, MONTREAL | | |
| McEwan, A. | 105 | vii | Notes on | 510 | R C |
| Peter | | | 216, 217 | i | |
| Evidence by, before R.C. <i>re</i> salt, . . . | 54, 190, 237 | R C | McGillivray, S. | 198 | v |
| Salt wells of | 185 | R C | W. | 105 | vii |
| McEwen, A. L. | 60 | xvi | 104 | viii | |
| Arthur | 228 | i | 117 | ix | |
| 240 | ii | | 142 | x | |
| McFarlane, Alex. | 86 | x | 74 | xi | |
| G. S. | 233 | i | 66 | xii | |
| Macfarlane, Thomas | | | 48 A | xiii | |
| Chief analyst, Dept. of Interior. . . | 4 | xiv | William (1823) | 162, 198 | v |
| Explorations by, for Montreal | | | McGinley, Arthur | 31 | xv |
| Mg. Co. | 139, 140 | vi | G. E. | 67 | xvi |
| Hematite reported by, Little Gros | | | McGinnis, Smith & Co. | 118 | ii |
| Cap | 11 | iii | McGlade, John | 105 | xv |
| 145 | viii | | McGlashan's mills, SIMCOE CO. | | |
| Notes by, on :— | | | Limestone at | 109 | xiii |
| Batchawana iron deposits . . . | 161, 163 | ix | McGowan, John | 133 | xiv |
| iron ores, Hastings dist. . . . | 39, 40 | ii | McGown, T. | 214 | v |
| 322-325, 331 | R C | | and Sons. <i>See</i> McGown gold | | |
| Madoc blast furnace | 22, 23 | ii | mine. | | |
| peat as a deodorizer | 190 | vi | lake, PARRY SOUND DIST. | | |
| Prospecting by, for the Montreal | | | Copper near | 165 | ix |
| Co. | 34, 195 | R C | mining. <i>See</i> McGown | | |
| Report by, Michipicoten div. ref. | | | mine. | | |
| to | 202, 204 | vii | Gold mill on | 100 | ix |
| N. of L. Superior | 168 | viii | Quartz on, auriferous | 88 | vii |
| Silver Islet mine discovered by, . . | 4 | xiv | mine, FOLEY TP., P. S. D. | | |
| data by | 142, 152 | vi | Accident at | 48, 57 | xi |
| Surveys by, L. Superior, ref. to, . . | 64 | ii | Notes on, 1895 | 265 | v |
| 124, 144, 145 | ix | | 1898 | 88 | vii |
| 189 | x | | 1899 | 100, 165 | ix |
| Views of, on copper-bearing rocks | | | 1900 | 120, 121 | x |
| of L. Superior | 132, 133 | vi | 1901 | 267 | xi |
| structure of L. Su- | | | 1902 | 116 | xii |
| perior basin | 75, 76 | iii | by Coleman | 98-100 | iv |
| Warning by, <i>re</i> picking eyes of | | | 259-260 | viii | |
| mine | 158 | vi | Rocks of | 120 | vi |
| Work by, Capelton, Que., ref. to | 35 | vi | petrography | 180 | ix |
| tavern, GUELPH TP., WELLING- | | | Shut down, 1900 | 37 | x |
| TON CO. | | | Gold Mg. Co. | | |
| Limestone at | 120 | xiii | Capital and date of charter | 11 | vii |
| McFarlen, Thomas James | 256 | ii | Diamond drilling by | 51, 56, 88 | x |
| Macfarlanite. | | | Property of, transferred to Parry | | |
| Port Arthur dist. | 55, 58 | xiv | Sound Copper Mg. Co. | 259 | viii |
| Silver Islet mine | 191, 194 | ii | McGrath, M. | 117 | ix |
| McFaul, Patrick | | | McGraw, Thomas | 137 | iii |
| Lithographic stone on farm of . . | 137 | iii | McGregor, D. | 105 | vii |
| McFee, Daniel | | | 104 | viii | |
| Gold mining by, Round lake . . . | 118 | v | David | 68, 273 | vi |
| John | 223 | i | George | 104 | xiii |
| McGarry tp., Nip. | | | James | 68 | vi |
| Gold locations in, map showing. | | | 44, 50 | x | |
| 202, 203 | xvi | | 82 | ii | |
| McGee—? | 28 | iii | bay, GEORGIAN BAY, L. HURON. | | |
| 171 | vii | | Copper south of | 91 | i |
| W. J. | | | Quartzites near | 72 | i |
| Notes by, on origin of natural | | | hotel, VILLE MARIE, QUE. | | |
| gas | 143 | i | Striae at, direction | 178 | ix |
| McGibbon, D. | | | lake, N. OF OTTAWA. | | |
| Brick-yard of, Shedden | 62 | xv | Marine shells on, altitude of . . . | 216 | x |

| | Page. | Vol. | | Page. | Vol. |
|---|---------------|--------|---|----------|---------|
| Macgregor tp., TH. B. D. | | | McIrvine tp., R. R. D. | 165, 166 | v |
| Amphibolite area in | 161 | A xv | Mack 26, 27 gold locs. | See Gold | |
| Granite in, for building-stone | 61 | R c | Bullion Mfg. Co. | | |
| Iron ore from, exhibited at | | | McKam process. | | |
| World's Fair | 79 | ii | For de-sulphurizing oil | 27 | iv |
| Nickel in | 59 | B xiv | McKay, A. A. | 105 | vii |
| niccolite | 205 | ix | | 74 | xi |
| McGuire, John | 41, 50 | x | A. G. | 108 | ix |
| Machar, J. M. | | | Annie | 117 | ix |
| Apatite mining by, Storrington | | | J. | 18 | A xiii |
| tp. | 170 | R c | John | | |
| Notes by, on Frontenac lead mine | 145 | R c | Mica mining by, Calvin tp. | 195 | iii |
| See also next ref. | | | (Hemlock) lake, NEAR OT- | | |
| iron mine, BEDFORD TP., FRON- | | | TAWA. | | |
| TENAC CO. | 136 | R c | Marl in | 122 | A xiv |
| McHardy, J. A. | 105 | vii | analysis | 39 | B xiii |
| | 117 | ix | Limestone on, analysis | 38 | B xiii |
| Machegamiching lake, S.E. OF RICE | | | mt., NEAR FORT WILLIAM, | | |
| LAKE, ALG. | 131 | ix | R. R. D. | | |
| Machinery. | | | Description of | 110 | vi |
| Canadian imports of, 1881-87 | 251, 468 | R c | Glaciation on | 133 | vii |
| McHugh, George | 32 | R c | Laeolithic sills of | 256 | A xiv |
| John | 26, 27 | viii | Photos of | 96, 97 | vi |
| Thomas | 45, 48 | xii | Section of | 39 | B xiv |
| McIlwraith iron pyrites mine, DAR- | | | Trap on | 37 | R c |
| LING TP., LANARK CO. | | | | 15 | v |
| Abandoned, 1900 | 154 | A xvi | McKechnie, Gilbert | 33 | xi |
| Notes on, and photo | 153, 154 | A xvi | McKecknie, Capt. | | |
| Originally worked for gold | 185 | A xvi | Misprint for Maconochie, which | | |
| McInkster, Ralph | 55 | vii | see. | | |
| McInnes, William | | | McKee, Alexander | 249 | iv |
| Notes by, on Mesabi iron range | | | McKeehan, H. H. | 117 | ix |
| extension in Ont. | 309 | xii | | 142 | x |
| Savant lake | 88, 89 | xii | | 75 | xi |
| Ref. to map by, Seine River reg. | 48 | v | McKeesport, NEAR PITTSBURG, U.S. | 370 | R c |
| surveys by, R. R. d. | 163, 164 | v | McKellar, Archibald | 26 | R c |
| | 151, 153 | vii | | 58 | iv |
| | 129 | xi | Donald | | |
| Shebandowan | | | Gold mining by, Jackfish bay | 26, 38 | R c |
| Lake dist. | 81 | v | | 189 | v |
| McIntosh, H. P. | | | J. A. | 123, 125 | i |
| Cost of nickel matte given by | 179, 180 | c xiv | John | | |
| Evidence by, before R.C., re:— | | | Duncan silver mine discovered | | |
| Canadian Copper Co. | 103 | R c | by | 34 | R c |
| free trade | 239 | R c | Gold prospecting by, Jackfish | | |
| mining laws | 317 | R c | bay | 112 | v |
| smelting at Sudbury | 381, 405, 406 | R c | Peter | | |
| want of railways | 211 | R c | Assistant to Bell | 105 | A xvi |
| Sec.-Treasurer, Stobie mine | 272 | v | Evidence by, before R.C.:— | | |
| McIntosh, W. | 104 | A xvi | free trade | 232 | R c |
| McIntosh Granite and Marble Co. | | | gold in Ont. | 115 | R c |
| Capital and date of charter | 11 | vii | iron in Ont. | 144 | R c |
| Macintosh, Hemphill & Co. | 119 | ii | ref. to | 75 | iv |
| McIntosh quarry, NEAR MADOC, | | | minerals, L. Superior | 61 | R c |
| HASTINGS CO. | | | mining laws | 311 | R c |
| Limestone from, analysis | 61 | B xiii | schools | 426 | R c |
| McIntyre, Duncan | 266 | vi | silver in Ont. | 197 | R c |
| | 82 | vii | Gold discovered by, Moss tp. | 25 | R c |
| Geo. | 160 | A xiv | | 123 | v |
| John | 167, 176 | iii | mining by, Jackfish bay | 112 | v |
| John J. | 25 | iv | | 111 | vi |
| | 77 | v | Seine River dist. | 4 | Bull. i |
| tp., THUNDER BAY DIST. | | | | 73, 74 | vi |
| Animikie rocks in | 31 | R c | Iron ore exhibited by, at World's | | |
| Galena in | 198 | ix | Fair | 80 | ii |
| Mispickel in | 57 | B xiv | found by, near Sturgeon | | |
| Siderite and sphalerite in | 201 | ix | river, Nipigon lake | 22 | R c |
| Silver veins in, course of | 33 | R c | | | |
| Trap beds in | 32 | R c | | | |

| | Page. | Vol. | | Page. | Vol. |
|--|-------------|------|---|---------------|------|
| McKellar, Peter—Con. | | | McKellar pt., L. SUPERIOR. | | |
| Iron ore mined by, Atikokan | | | Direction of striae at..... | 178, 179 | ix |
| range..... | 72, 73 | ii | Geology of, and vicinity..... | 148, 149, 179 | ix |
| | 35 | x | Pectolite at..... | 206 | ix |
| Notes by, on: | | | Shore near, photo..... | 148 | ix |
| Atikokan iron range..... | 70, 71 | ii | Terrace at, altitude..... | 175 | ix |
| gold mining, Jackfish bay.... | 189 | v | tp., P.S.D. | | |
| Kokagaming | | | Limestone in..... | 196 | ix |
| lake..... | 237 | ii | | 91 B | xiii |
| L. of the Woods | | | McKenty farm, MULLET'S CORNERS, | | |
| dist..... | 266 | v | NEAR MADOC. | | |
| Moss tp. (Huron- | | | Notes on, by Fraleek..... | 163 A | xvi |
| ian g.m.t.)..... | 79, 123 | v | McKenzie, A. | 105 | vii |
| W. of Port Arthur. | | | | 66 | xii |
| | 230, 231 | iv | | 48 A | xiii |
| silver, Nipigon bay..... | 205 | v | MacKenzie, Sir Alexander | | |
| Norway gold mine partly owned | | | Description by, of mode of living | | |
| by..... | 31 | iii | at Fort William, 1804..... | 199 | v |
| Paper by, on silver mining, Port | | | Notes by, on:— | | |
| Arthur dist..... | 237 | iv | Kenora..... | 169 | x |
| Report by, on Empress g.m..... | 265 | vi | Rainy river..... | 208 | v |
| Silver discovered by, Port Arthur | | | site of Fort St. Pierre..... | 197 | v |
| dist..... | 38, 194 | R C | Pigeon river explored by..... | 198 | v |
| Statement by, re barytes, McKel- | | | Ref. to travels by, Port Arthur | | |
| lar island..... | 250 | iv | dist..... | 161 | v |
| iron mining, | | | McKenzie, B. E. | 160 A | xiv |
| Matawin river..... | 276 | v | Dr. D. C. | 31, 33 | vii |
| Surveys by, Atikokan river, ref | | | | 21 | viii |
| to..... | 142 | v | Ewen | 87, 140 | vii |
| Nipigon lake..... | 213, 214 | x | James | | |
| Views of, re source of silver, | | | Captain, Mikado g.m..... | 52 | ix |
| Th.B.d..... | 29, 35 | R C | | 77 | x |
| Vice-President, Empress G.M. Co. | 263 | vi | | 66 | xi |
| Zenith zinc mine discovered by. | 87 | ix | | 59 | xii |
| See also McKellar mine, Sabawe | | | | 70 A | xiii |
| lake, near Schreiber. | | | | 58 A | xiv |
| Bros. | | | Gold prospecting by, Anzhekum- | | |
| Acknowledgments to..... | 48, 84 | v | ming lake..... | 85 | vi |
| Gold mining by, Jackfish bay. | | | Gold prospecting by, Minnitaki | | |
| | 84, 85, 104 | v | lake..... | 57 | v |
| Iron mining by, Atikokan range, | | | Manager, Cobalt refining plant. | | |
| notes..... | 75 | iv | Copper Cliff..... | 65 A | xvi |
| McKellar, McKellar tp., P.S.D. | | | Mackenzie, Roderick | | |
| Limestone quarry near..... | 169 | ix | Gold mining by, Galbraith tp.... | 40 | iii |
| claim, ELZEVR TP., HASTINGS | | | William | | |
| co. | | | Part owner, Wendigo gold mine. | 71 | x |
| Mispickel in..... | 105 | xi | McKenzie, William | | |
| iron mine (E10-12 loc.), SABAWE | | | See also MacKenzie & Mann. | | |
| LAKE, ATKOKAN RIVER. | | | President, Atikokan Iron Co.... | 59 A | xv |
| Notes on, 1895..... | 141 | v | Shareholder, Willson Carbide Co. | 22 | x |
| 1900..... | 111, 112 | x | MacKenzie & Mann. | | |
| by Miller..... | 306 | xii | Boring by, with Govt. drill.... | 58, 60 | xi |
| island, L. SUPERIOR. | | | Copper option held by, N. of L. | | |
| Barytes on..... | 177 | i | Huron..... | 98 | xii |
| | 193 | ii | Iron mining by, Burwash lake.... | 17 A | xvi |
| | 250 | iv | W. of Port | | |
| | 276 | v | Arthur..... | 266 | xi |
| | 195 | ix | | 13, 72 A | xiv |
| Rhodochrosite from..... | 187 | ii | | 173 A | xvi |
| | 208 | ix | See also Mann, D. D. | | |
| Silver-bearing rocks in..... | 33 | R C | McKenzie, Macgregor tp., TH.B.D. | | |
| Zinc-blende in..... | 209 | ix | | 159, 161 A | xv |
| argentiferous..... | 62 | R C | apatite mine, Bowman tp., | | |
| | 56 B | xiv | OTTAWA CO., QUE. | | |
| Island Silver Mg. Co. | | | Rocks in..... | 140 | R C |
| Capital and date of charter..... | 9 | xii | MacKenzie creek, DINGWIC LAKE, | | |
| mine, NEAR SCHREIBER, TH.B.D. | | | R.R.D..... | 54 | v |
| Notes on, 1900..... | 88 | x | | | |

| | Page. | Vol. |
|--|----------|------|
| McKenzie mills, BARTON CREEK, | | |
| GRAND RIVER, | | |
| Gypsum at | 53 B | xiii |
| Mackenzie river, MACK. | | |
| Discovery of | 198 | v |
| river, L. SUPERIOR, | | |
| Silver mining near | 195 | R C |
| station, E. of PORT ARTHUR, | | |
| Tn. B. D. | | |
| Gold mining near | 89 | x |
| tp., P. S. D. | | |
| Copper ores in | 169, 170 | ix |
| Limestone in | 93, 94 B | xiii |
| McKerrow, W. D. | 45 | xii |
| Mackey, J. J. | | |
| Gold mining by, Michipicoten | | |
| div. | 11 Bull. | iii |
| 194 | | vii |
| 146 | | viii |
| 114, 117 | | ix |
| 142 | | x |
| John | 207 | iv |
| R. E. | 117 | ix |
| pt., WAWA LAKE, ALG. | 114 | ix |
| Mackie, Thomas | 268 | vi |
| W. | 75 A | xiv |
| 99 A | | xv |
| 84 A | | xvi |
| McKillican, D. V. | 50 | ix |
| McKim tp., SUDBURY DIST., NIP. | | |
| <i>See also</i> Copper Cliff mine. | | |
| Elsie mine. | | |
| Murray mine. | | |
| Copper in | 24 | R C |
| chalcopyrite | 196 | iv |
| Millerite in | 59 B | xiv |
| Pyrrhotite in | 78 C | xiv |
| Rocks in, garnetiferous | 292 | xii |
| granite | 241 | xii |
| 55, 83 C | | xiv |
| greenstone | 50 C | xiv |
| off-set deposits | 57 C | xiv |
| greywacke | 76 C | xiv |
| schists, crystalline | 80 | i |
| Smaltite in | 194 | ii |
| 214 | | vi |
| 209 | | ix |
| 59 B | | xiv |
| Survey lines of, destroyed by fire. | 237 | xii |
| McKimm, U. H. | 105 | vii |
| Mackinac island, MICHIGAN, U.S. | | |
| Notes on, by Blue | 108, 109 | v |
| McKindsey, George C. | 31 | v |
| McKinley, James H. | | |
| Cobalt silver field discovered by. | 7 A | xvi |
| John | 98 | ix |
| Robert | 255 | ii |
| =Darragh=Savage mines, Co- | | |
| BALD. | | |
| Capital and date of charter | 30 A | xvi |
| Diabase in | 13 A | xvi |
| Dividend from | 37 B | xiv |
| Mining class at | 13 A | xvi |
| Minor class at | 52 A | xvi |
| Minor ref. to | 15 B | xiv |
| Notes on | 79 A | xv |
| by Miller | 106 A | xiii |
| Owners | 5 A | xiv |

| | Page. | Vol. |
|---------------------------------------|-----------------|------|
| McKinley=Darragh=Savage mines. | | |
| — <i>Con.</i> | | |
| Producing, 1905 | 7 A | xv |
| 1906 | 8 A | xvi |
| Veins in, strike of | 36 B | xiv |
| tariff bill. | | |
| Affecting iron | 67 | ii |
| lime | 132 | i |
| nickel | 28 | vii |
| McKinnon, Alexander | 25 | viii |
| C. A. | 142 | x |
| 66 | | xii |
| D. | 89 A | xv |
| D. L. | | |
| Action against | 49 | xi |
| Contractor, Copper Cliff m | 267, 269 | v |
| 95 | | vii |
| 25, 34 | | viii |
| 24, 25 | | ix |
| 51, 280 | | xi |
| 45 | | xii |
| bridge, MAGPIE RIVER, L. Su- | | |
| PERIOR. | | |
| Canoe navigation near | 286 A | xiv |
| Forest fires near | 296 A | xiv |
| Rocks on and near | 307, 344, 345 A | xiv |
| diabase | 294 A | xiv |
| Trees near | 296 A | xiv |
| quarry. <i>See</i> Victoria quarry. | | |
| McKinstry, R. | 64 A | xiii |
| McLaren, A. | 105 | vii |
| 104 | | viii |
| A. F. | | |
| Part owner, Big Ruby mine | 124 | vii |
| President, Summit Lake Mg. Co. | 91 | xii |
| Vice-President, National Port- | | |
| land Cement Co. | 149 A | xiv |
| Donald | 92 | i |
| G. B. | | |
| Provincial silver mine discovered | | |
| by | 10 A | xvi |
| J. | 105 | vii |
| James | | |
| Part owner, Haronian mine | 123 | v |
| James | | |
| Sudbury locations owned by | 170 C | xiv |
| Hon. Peter | | |
| Apatite mining by, Bobs lake ... | 239 | i |
| Director, Cataragui Mg. Devel. | | |
| Co. | 275 | v |
| 128 | | x |
| Mica mining by. <i>See</i> McLaren | | |
| mica m. | | |
| Shareholder in Calabogie Co. | 136 | R C |
| Sophia gold mine owned by. | 117 | x |
| 102 | | xi |
| W. L. | 287 | xi |
| 23 A | | xvi |
| William | | |
| Quarrying by, Credit Forks | 99 | i |
| apatite mine, TEMPLETON TP., | | |
| OTTAWA CO., QUE. | | |
| Sugar apatite in | 442 | R C |
| creek, BAY LAKE, NIP. | 139 | vii |
| mica mine, N. BURGESS TP., | | |
| LANARK CO. | | |
| Notes on, 1901 | 287 | xi |
| 1902 | 128 | xii |
| McLashan, L. | 136 | i |

| | Page | Vol. | | Page | Vol. |
|---|---------------|--------|---|------------|--------|
| McLaughlin, Charles | 47-50 | x | McManus, A. E. | 76 | viii |
| F. | 286 | xi | | 71 | ix |
| Hugh R. See Farquharson, McLaughlin and Hartney | | | McMartin, D. George | | |
| James | 141 | A xiv | See also McMartin mica mine. | | |
| Thomas | 32 | xii | Apatite mining by, N. Burgess tp. | 174 | R C |
| | 157 | A xiv | evidence before R. C. | 150, 175 | R C |
| mill, ARNPRIOR. | | | Gen. Manager, Baby mica mine. | 278 | v |
| Analysis of limestone from. | 106 | B xiii | Pike Lake mica | | |
| McLean, A. | 117 | ix | mine | 277 | v |
| | 142 | x | Owner, Martha mica mine. | 191 | iii |
| | 75 | xi | J. | 5 | A xiv |
| Alexander | | | | 73 | A xv |
| Evidence by, before R.C. re:— | | | mica mine, N. BURGESS TP., | | |
| free-trade | 235 | R C | LANARK CO. | | |
| marble | 83 | R C | Notes on, 1895. | 279 | v |
| | 64 | B xiii | McMaster Hall, TORONTO. | | |
| Marble quarry of, Renfrew. | 102 | B xiii | Building stone of. | 79 | R C |
| Charles John | | | lake, DOG RIVER, L. SUPERIOR. | | |
| Gold mining by, Seine River dist. | 159 | v | Fall from, to L. Superior. | 286 | A xiv |
| | 73, 75 | vi | Morainic drift near. | 288 | A xiv |
| | 81 | xii | Notes on, and vicinity. | 140 | viii |
| | 48 | A xv | Terrace near. | 176 | ix |
| John R. | | | McMichael, A. F. | 117 | ix |
| Gold mining by, L. of the Woods. | 182 | v | M. | 32 | ix |
| Michipicoten | | | McMicken, H. G. | 16 | iii |
| div. | 75 | xi | gold mine, L. OF THE WOODS. | 64 | R C |
| | 66 | xii | McMillan, D. J. | 217 | x |
| William | 158, 166 | xii | E. | 75 | xi |
| lake, NEAR ROSSPORT, L. Su- | | | J. | | |
| PERIOR. | | | Copper mine of, Foley tp., notes | | |
| Nickel mining near | 109 | x | by Coleman. | 168 | ix |
| co., PENN. | | | Hon. J. | 128, 129 | x |
| Natural gas in | 152 | R C | James G. | | |
| McLennan tp., NIP. | | | Acknowledgments to. | 45 | A xv |
| Gold mining in. See Bonanza g.m. | | | Manager, Foster mine, Cobalt. | 85 | A xv |
| Mammoth g. | | | Report by, on Explorations in | | |
| m. | | | Abitibi dist. | 184-212 | A xiv |
| Nickel in. | 284 | xi | ref. to. | 117 | A xv |
| | 273, 276 | xii | Work by, 1903. | x, 52, 53 | A xiii |
| See also Blue Lake mine. | | | John | 118 | v |
| Rocks in, diabase | 73 | C xiv | N. | | |
| nickel eruptive. | 62 | C xiv | Killed at Shakespeare g. m. | 26-29 | A xiv |
| Swamps in | 7 | C xiv | Manager, Mikado g. m. | 52 | ix |
| Terraces in | 106 | C xiv | | 77, 93 | x |
| McLeod, —? | | | | 65 | xi |
| Silver mining by, Coleman tp. | 7, 80 | A xv | | 60 | A xiii |
| A. J. (H.B.C.) | 132, 133, 142 | ix | Regina g. m. | 254 | xi |
| Angus. | 181 | vi | | 59 | xii |
| Bernard (H.B.C.) | | | Notes by, on Mikado g. m. | 81 | xi |
| Photo of. | 184, 185 | viii | Mrs. N. C. | 59 | xii |
| Trading in Night-Hawk Lake reg. | 175 | viii | Truman. | 48, 50 | x |
| C. H. | 217 | i | W. W. | 271 | xi |
| D. | 117 | ix | copper mine, ABERDEEN TP., | | |
| George | 53, 57 | xi | ALG. | 22, 53, 57 | xi |
| Hugh | 30 | vii | McMullen, James | 29 | ix |
| John | 273 | viii | McMurchy, Dr. A. | 210, 211 | iv |
| | 74 | ix | | 68 | vi |
| Malcolm | 40 | iii | | 26 | viii |
| Murdock | 53, 57 | xi | | 25 | ix |
| Norman | 206 | v | | 49 | xi |
| W. | 86 | ix | McNab, J. W. | 133 | A xiv |
| pt., ABITIBI RIVER. | 107 | A xiii | Iron Co. | | |
| McLurg, Dr. J. D. | 29 | A xv | Capital and date of charter. | 11 | vii |
| | 32 | A xvi | iron mine, NEAR ARNPRIOR, | | |
| McLymont, Victor | 515-518 | R C | RENFREW CO. | | |
| McMahon, James | 25 | ix | Hematite in. | 55 | ii |
| tp., ALG. | | | analysis | 55, 56 | ii |
| Copper mining in. | 273 | xi | Notes on, by owner. | 141, 142 | R C |
| | 100 | xii | | | |

| | Page. | Vol. | | Page. | Vol. |
|---|-------------|--------|--|--------|--------|
| McNab lake, KEPPEL TP., GREY CO. | | | McQuat, William | | |
| Marl on..... | 31 | xii | Ref. to surveys by, Abitibi dist. . | 81 | i |
| | 17 | B xiii | | 82 | B xiii |
| | 159 | A xiv | Quinze river. | 54 | ii |
| | | | | 202 | x |
| tp., RENFREW CO. | | | | 96 | iv |
| Barytes in..... | 195 | ix | Macoun, Prof. John | | |
| Brick-yard in. See Arnprior. | | | Macozenda river. See Trout river, | | |
| Lion in..... | 32 | ii | Kapuskasing lake. | | |
| exhibited in London.... | 34 | ii | McParland, John | | |
| mining. See McNab mine. | | | McNally mica mine owned by .. | 132 | x |
| specular. estimate of..... | 35 | ii | Pike Lake mica mine leased to.. | 128 | xii |
| Limestone in..... | 102 | B xiii | Macphail, A. | 36 | A xvi |
| analysis..... | 105 | B xiii | McPhail, Prof. A. | | |
| quarrying. See Brae- | | | Tests by, on crushing strength of | | |
| side. | | | clay..... | 37 | B xv |
| McNair, — ? | 144 | ix | Alexander | 59 | A xvi |
| McNally, Bernard | 52 | xi | J. | 142 | x |
| H. W. | 52, 57 | xi | McPhee, Alexander | 123 | xii |
| mica mine, NEAR WESTPORT, | | | Frank | 86 | ix |
| LEEDS CO. | | | McPherson, A. | 91 | B xiii |
| Accident at..... | 52, 57 | xi | falls, VERMILION RIVER, NIP. | | |
| Notes on..... | 133 | x | Water-power at..... | 13, 62 | A xv |
| McNaughton, D. | 167, 176 | iii | photo of plant..... | 68 | A xiv |
| G. W. | | | McPhillips, F. | 41 | viii |
| Manager, for General Electric Co. | 291 | xi | McQuade copper claim, NEAR SANS | | |
| | 91 | A xiii | SOUCI, P. S. D. | 101 | ix |
| | 39, 41, 103 | A xv | McQuaig, John | 86 | x |
| Hanlan mica mine.... | 129 | xii | McQuarrie, John | | |
| Lacey mica mine..... | 287 | xi | Evidence by, re minerals in Rainy | | |
| | 84 | A xiv | Lake dist. | 64 | B c |
| | 86 | A xvi | ref. to..... | 123 | iv |
| John | | | Macquenne. See Maquenne, Leon | | |
| Gold mining by, Round lake ... | 118 | v | McQuire, H. F. | | |
| | 126, 143 | vi | Recorder, Parry Sound Mg. div. . | 36 | A xvi |
| McNeil, Malcolm | 279, 280 | v | Report by, on same..... | 44, 45 | A xvi |
| Watford D. | 156 | xii | McRae, Hector | | |
| McNeill, E. W. | 142 | x | Director, Black Donald Graphite | | |
| | 75 | xi | Co..... | 24 | x |
| H. C. | 341 | xii | Sec.-Treasurer, Ontario Graphite | | |
| MacNichol, C. | 107 | vi | Co..... | 31 | v |
| Macnider tp., RIMOUSKI CO., QUE. | | | J. C. | 38 | vi |
| Feat at..... | 198 | ii | Acknowledgments to..... | 119 | B xiii |
| McNolty, J. P. | 271 | xi | Boring record furnished by, Port | | |
| | 80 | xii | Colborne..... | 129 | i |
| Percy | 67 | vi | Views of, re Corniferous, near Port | | |
| McNulty, Percy | 246 | ii | Colborne..... | 35 | xi |
| T. P. | 79 | A xiii | J. W. | | |
| Macoma, | | | Director, Black Donald Graphite | | |
| Maitland (near)..... | 242 | A xiii | Co..... | 24 | x |
| Payne river..... | 219 | x | Manager, Black Donald graphite | | |
| Williamsburg (near)..... | 220 | x | mine..... | 292 | xi |
| " <i>calcareo.</i> | | | | 134 | xii |
| Abitibi river..... | 189 | viii | P. J. | 104 | viii |
| James bay..... | 143 | A xiii | | 117 | ix |
| Missinaibi river..... | 162 | A xiii | | 142 | x |
| Saxicava sand..... | 32 | B xv | | 75 | xi |
| Stormont co..... | 224 | x | | 66 | xii |
| " <i>fragilis.</i> | | | | 48 | A xiii |
| Abitibi river..... | 189 | viii | and McDonald. | | |
| Crysler (near)..... | 218 | x | Silver mining by, Cobalt..... | 78 | A xv |
| Finch..... | 217 | x | McRoberts | 20 | vi |
| Gladstone, near Prescott..... | 220 | x | <i>Macro tomus.</i> | | |
| James bay..... | 143 | A xiii | Emerald lake..... | 87 | B xiii |
| Ottawa..... | 216, 224 | x | McTavish, Alexander | | |
| Saxicava sand..... | 32 | B xv | J. W. | 29 | A xv |
| Smiths Falls (near)..... | 217 | x | | 105 | vii |
| Maconochie, A. W. | 22 | xi | | 104 | viii |
| Maconochie, (NOT McKECHNIE.) | | | | | |
| Capt. R. B. | 143 | ii | | | |

| | Page. | Vol. | | Page. | Vol. |
|--|--------------|--------|---------------------------------------|-----------------------|--------|
| McTavish tp., TH. B. D. | | | Madill corundum mine, METHUEN | | |
| Galena in..... | 198 | ix | TP., PETERBORO CO. | | |
| notes by Bell..... | 87 | A xiii | Corundum in, in syenite, photo. | 216, 217 | viii |
| Iron in, boring for..... | 29-31 | A xiv | Madison, William A. | 69 | xv |
| See also Animikie iron range. | | | Madoc, MADOC TP., HASTINGS CO. | | |
| Loon lake. | | | Brickyard at..... | 69 | B xv |
| Rocks in. See Bass lake. | | | analysis of clay used in..... | 18 | B xv |
| McTighe, T. J. | | | Cobalt bloom near..... | 11 | A xv |
| Magnetic separation of pyrrhotite | | | Fluorspar mining near..... | 106 | A xv |
| by..... | 164 | ii | Furnaces at, notes on..... | 22 | ii |
| McTomney, P. | 142 | x | Glaciation near..... | 237 | A xiii |
| McVeigh, Peter | 105, 197 | vii | beaches..... | 232 | A xiii |
| creek, HAWK LAKE, MICHIGAN | | | Iron mining near..... | 97 | xvii |
| COTEN DIV., ALG. | | | See also Huntingdon tp. | | |
| Character of..... | 160 | ix | Iron pyrites mining near..... | 20 | A xv |
| Huronian rocks on..... | 196 | vii | See also Bannockburn. | | |
| Lacustrine deposits near..... | 192 | A xv | Lead smelter at, proposed..... | 288 | viii |
| Minor ref. to..... | 184 | A xv | Limestone in, analysis..... | 62 | B xiii |
| iron mine, BATHURST TP., | | | quarried..... | 61 | B xiii |
| LANARK CO. | | | marble, notes..... | 65 | B xiii |
| Iron ore of, titaniferous..... | 51 | ii | quarried..... | 204 | xi |
| Limestone in, with apatite..... | 46 | ii | Mining class at, 1897..... | 260 | vii |
| McVicar, George | | | Mispickel near..... | 199 | xi |
| Silver mining by, Port Arthur | | | Rocks at, petrographical notes..... | 207 | xi |
| dist..... | 31, 117, 194 | R C | slate (quarried)..... | 204 | xi |
| McVittie, M. | | | Tale near..... | 210 | ix |
| Brick yard of, Whitefish, Alg..... | 57 | B xv | mining..... | 24 | x |
| William | | | | 205 | xi |
| Blue Lake nickel mine owned by..... | 285 | xi | | 92 | A xiii |
| Blue-ite found by, Gertrude mine..... | 160 | C xiv | production, 1906..... | 26 | A xvi |
| Coal prospecting by, Onaping dist..... | 82 | xi | Whetstone quarried near..... | 201 | xi |
| | 96 | C xiv | Madoc tp., HASTINGS CO. | | |
| Prospecting by, Sudbury dist..... | 94 | vii | Chalcodite in..... | 196 | ix |
| | 32, 33, 135 | C xiv | Cobalt ores in:— | | |
| tp., NIP. | | | erythrite..... | 60 | B xiv |
| Gold locations in, map showing | | | | 214 | vi |
| | 202, 203 | A xvi | | 198 | ix |
| McWhinney & Co. | 119 | ii | smaltite..... | 214 | vi |
| Madawaska river, OTTAWA RIVER. | | | | 209 | ix |
| Chazy formation on..... | 41 | R C | Copper ores in:— | | |
| Corundum on and near..... | 64, 65 | vi | chalcopyrite..... | 196 | ix |
| | 221 | vii | | 161 | A xvi |
| | 222, 223 | viii | malachite..... | 202 | ix |
| Crystalline limestone near..... | 101 | B xiii | tetrahedrite..... | 38 | ix |
| Diopside on..... | 197 | ix | | 210 | ix |
| Pargasite on..... | 206 | ix | Franklinite in..... | 198 | ix |
| Surveys on, by Murray..... | 244 | viii | Gold in..... | 199 | ix |
| Waterpower on..... | 66 | vi | discovery..... | 27, 28 | R C |
| | 219, 252 | vii | | 35, 38 | ix |
| | 237 | viii | mining, early..... | 54 | iii |
| for Black Donald m..... | 27 | xi | evidence before R. C. | | |
| | 26 | xii | | 65, 66, 110, 111, 115 | R C |
| | 87 | A xiv | notes by Merritt..... | 106 | R C |
| | 14 | A xv | speculation in..... | 185 | ii |
| from Mountain chute..... | 27, 133 | xi | See also Bannockburn g. m. | | |
| | 222 | vii | Sophia g. m. | | |
| photo..... | 390, 391 | R C | Greenstone in..... | 15 | v |
| suggested use of..... | | | Iron ores in..... | 133 | R C |
| See also High falls. | | | | 31, 36-40 | ii |
| Ragged chute. | | | exhibited in Chicago..... | 80, 82 | ii |
| Maddin, S. D. | 31 | A xvi | London..... | 33 | ii |
| Madge, P. | 117 | ix | hematite..... | 288 | viii |
| | 142 | x | | 199 | ix |
| | 74 | xi | loadstone..... | 82 | ii |
| W. C. | 99 | xii | | 201 | ix |
| Madgeburg, HOLLAND. | | | magnetite, analysis..... | 202 | ix |
| Glass works at..... | 76 | B xiv | | | |

| | Page. | Vol. |
|--|-------------|-----------|
| Magnetite. — <i>Con.</i> | | |
| Michipicoten div. | 187 | vii |
| Rainy River dist., 4th base line. | 117 | vii |
| Savant lake, in sand. | 89, 90 | xii |
| Seeley Bay, titaniferous, notes. | 230, 231 | vii |
| Sudbury deposits. | 162 c | xiv |
| Clarabelle mine. | 40 c | xiv |
| Foy tp. | 70 c | xiv |
| Magnetometer. | | |
| Prospecting with, N. of L. Superior. | 142 | xi |
| Sudbury dist. | 15, 57, 67, | 144 c xiv |
| "Magnificent" H. M. S. | | |
| Armour plate of. | 163 | iii |
| Magnus, Philip. | 491 | R C |
| Magnuson, T. | 342 | xii |
| Magpie Gold Mg. and Development Co. | | |
| Capital and date of charter. | 25 A | xv |
| lake, MAGPIE RIVER, MICHIPICOTEN BAY. | | |
| Altitude of low land near. | 9 Bull. | iii |
| Description of, by Willmott. | 199 | vii |
| Route from, to Missinaibi, description. | 197-199 | vii |
| Striae near, direction. | 178 | ix |
| Swamp near, height of. | 205 | vii |
| river, MICHIPICOTEN DIV. | | |
| Beaches near. | 196 A | xv |
| altitude. | 176 | ix |
| Brook trout in. | 297 A | xiv |
| Country at mouth of, character. | 176 A | xv |
| Glaciation on. | 204 | vii |
| Pleistocene deposits. | 196 A | xv |
| Iron ores on, with jasper. | 200 | x |
| Jaspilite east of. | 309 A | xiv |
| Minor ref. to. | 185 | vii |
| Notes on, by Willmott. | 5, 6 Bull. | iii |
| 199-201 | vii | |
| Bain. | 286 A | xiv |
| Photo of. | 156 | vii |
| 295 A | xiv | |
| falls. | 176, 177 | xi |
| Prospecting on, advisable. | 11 Bull. | iii |
| Rocks on. | 144, 146 | viii |
| 166, 167 | xi | |
| Rocks on, acid eruptives. | 347 | xiv |
| biotite pierite. | 191 A | xv |
| dike rocks. | 214 A | xiii |
| Doré conglomerate. | 207, 344, | 345 A xiv |
| petrography. | 340 A | xiv |
| granite porphyry, petrography. | 176 | xi |
| greenstone. | 158 | xi |
| iron bearing. | 256 | viii |
| 322 A | xiv | |
| schists, strike of. | 140, 144 | viii |
| similar to iron formation of Michigan. | 151 | ix |
| Route to, from Kabenung lake. | 292, 293 A | xiv |
| Missinaibi. | 294, 295 A | xiv |
| Sand plains of, valley of. | 159, 164 | xi |
| Topography of. | 153 | xi |

| | Page. | Vol. |
|---|----------------------|------|
| Magpie river. — <i>Con.</i> | | |
| Trees on. | 296 A | xiv |
| Waterpower on. | 13 Bull. | iii |
| 206, 252 | vii | |
| 299 A | xiv | |
| 201 A | xv | |
| Maguire lake, MICHIPICOTEN DIV. | | |
| Length of. | 293 A | xiv |
| Minor ref. to. | 286, 287 A | xiv |
| Mahaffy tp., ALG. | | |
| Mattagami river in, description. | 120 A | xv |
| Soil in, analysis. | 153, 154 A | xv |
| and timber in. | 120, 136, 141 A | xv |
| Waterpower in. | 129 A | xv |
| Mahler, —? | | |
| Analysis by, of coke and oil. | 166 | vi |
| Mahogany. | | |
| For street paving. | 104 | iii |
| Mahoney, D. J. | 66 | xii |
| <i>Maidanthemum canadense.</i> | | |
| Abitibi Lake dist. | 241 A | xiv |
| Mattagami valley. | 150 A | xv |
| "Maid of the Mill" ss. | 87 | vii |
| Maiden's Leap Mt., MICHIBICOTEN LAKE, TH. B. D. | 296 A | xiv |
| Maillechort. | | |
| Description of. | 160 | ii |
| Formula for a true. | 159 | ii |
| Nickel for making. | 155 | ii |
| "Maine" ss. | | |
| Armour of, nickel-steel for. | 149, 157, 159, 163 | iii |
| Maine, U. S. | | |
| Iron production of, 1887. | 468 | R C |
| Main Mining Co. | | |
| Capital and date of charter. | 9 | x |
| Nickel range. | | |
| Report on, by Coleman. | 242-273 | xii |
| <i>See also</i> Sudbury dist. | | |
| springs (OF WATCHES). | | |
| Price per ton. | 354 | R C |
| Mainville, Alex. and Nichol | | |
| Nomenclature of Windigoostigwan lake given by. | 138 | v |
| Work by, 1895. | 47, 52, 53, 135, 136 | v |
| Pierre. | 40 | iv |
| Maisonnette tp., BERTHIER CO., QUE. | | |
| Samarskite and beryl found in. | 237 | vii |
| Maitland, J. W. | 108 | ix |
| 17 | x | |
| 32 | xii | |
| 17 B | xiii | |
| 92 | vii | |
| James. | | |
| Maitland, AUGUSTA TPL., GRENVILLE CO. | | |
| Gravel bar at, altitude. | 222 | x |
| Marine deposits near. | 220 | x |
| Trenton formation at. | 48 B | xiii |
| river, L. Huron. | | |
| Erie clay on. | 12 B | xv |
| photo. | 13 B | xv |
| Section of strata on. | 67 B | xiii |
| "Majestic" ss. | 109 | x |
| H. M. S. | 163 | iii |
| 47 | xi | |
| Oil Co. | | |
| Capital and date of charter. | 25 A | xv |

| | Page. | Vol. | | Page. | Vol. |
|---|-------------|--------|--|-------------|--------|
| Major, G. R. | 32 | viii | Mamainse, MICHIGICOTEN DIV. | | |
| Syndicate. | | | Copper at | 36, 67 | R C |
| Oil well of, Leamington | 116 | A xiv | bornite | 194 | ii |
| Malachite. | | | chalcocite | 195 | ix |
| Determination of | 204 | vi | chalcopyrite | 196 | ix |
| Exhibited at World's Fair | 192 | ii | evidence before R. C. | 67, 92, 197 | R C |
| Grant co., Oregon | 71 | B xiv | mining | 98, 102 | R C |
| Hardness of | 202 | vi | mode of occurrence | 175 | i |
| Hudson tp. | 51 | A xvi | native | 197 | ix |
| Manitou lake. | 64 | iv | Cornacite at | 191 | ii |
| Notes on, by Goodwin | 212 | vi | Epidote at | 191 | ii |
| Occurrences of | 202 | ix | Galena at | 92 | R C |
| Port Arthur dist. | 58 | B xiv | Garnet at | 198 | ix |
| Prospecting for, hints on | 456 | R C | Jaumontite at | 198 | ix |
| Specific gravity of | 202 | vi | Mesolite at | 201 | ix |
| Malahide tp., ELGIN CO. | | | Population in dist. of 1898. | 147 | viii |
| Oil well in | 109 | A xiv | Rocks at and near | 132 | vi |
| Malchite. | | | Compared to Michigan copper | | |
| Sudbury (near) | 54, 76, 123 | C xiv | ranges | 141, 145 | ix |
| Malcolm, W. | 117 | ix | Keweenaw | 36, 39, 102 | R C |
| | 142 | x | Photo and petrographical notes. | 168-172 | viii |
| Malet, Sir E. | | | Sandstone, red | 40 | R C |
| Consular report by, on peat man- | 212-214 | ii | Shaft head and engine house at, | | |
| ufacture in Germany | | | photo | 152, 153 | viii |
| Malhiol galena vein, DORION TP., | | | Sphalerite at | 209 | ix |
| Th. B. D. | | | Surveying at, early | 126 | vi |
| Rocks cut by, notes | 38 | R C | Terraces at, altitude | 153 | viii |
| Maligne (OR KAWAWAGAMAK) river, | | | Thomsonite at | 194 | ii |
| R. R. AND Th. B. DISCS. | | | | 210 | ix |
| Character of | 119, 120 | v | Mamainse bay. See Sand bay. | | |
| Route from, to Shebandowan lake. | 125 | v | copper mine, NEAR MAMAINSE | | |
| Mallincroft Chemical Co. | 122 | xi | HARBOUR, L. SUPERIOR. | | |
| Malloch lake, WHITE-CLAY RIVER, | | | Notes on, by Coleman | 129 | viii |
| ABIBI RIVER. | | | harbour, L. SUPERIOR. | | |
| Notes on, by Bolton | 184 | xii | Notes by Coleman, on region | | |
| Mallotus villosus. | | | around | 128 | viii |
| Ottawa | 32 | B xv | pen., L. SUPERIOR. | | |
| Greens creek | 224 | x | Copper mining on, Dawson's | | |
| Malloy, Thomas | 31 | A xv | views. 78-82 | iii | |
| Mallory-town, YONGE TP., LEEDS CO. | | | history. 73-75 | iii | |
| Clay plain near | 221 | x | Geology and map of | 69-72 | iii |
| | 241 | A xiii | pt., MICHIGICOTEN DIV. | | |
| Iron at, native | 200 | ix | Copper at | 208, 209 | v |
| Malone, MARMORA TP., HASTINGS CO. | | | early knowledge | 110 | v |
| Country north of, character. | 232 | A xiii | mining | 241 | ii |
| Gold near, notes by Miller | 198 | xi | 4, 123, 240 | iv | |
| mining. See Marmora tp. | | | 4 | v | |
| Iron near, magnetite | 288 | viii | Notes, by Blue, on a visit to | 66-69 | iii |
| See also Dufferin m. | | | Trap rocks on | 15 | v |
| Mispickel near | 52 | iii | river, L. SUPERIOR. | | |
| gold mine, MALONE, HASTINGS | | | Terraces at mouth of, level | 155 | viii |
| co. | | | Mamattawa, KENOGAMI RIVER, ALG. | | |
| Notes on, 1895 | 263 | v | Rocks in vicinity of | 32 | B xiii |
| iron mine, MALONE, HASTINGS | | | Mammals. | | |
| co. | | | See also the separate species. | | |
| Work at, 1897 | 25 | vii | Abitibi dist. | 127 | A xiii |
| lake, NEAR LARDER LAKE, NIP. | | | 212 | A xiv | |
| Character of | 221 | xi | Lake Huron slope | 170 | vi |
| Sand hills near | 223 | xi | Timagami Lake region | 58 | R C |
| Maloney, T. | 269 | vi | | | |
| J. & Co. | 28 | xii | | | |
| iron mine, MARMORA TP., | | | | | |
| HASTINGS CO. | 133 | R C | | | |
| Maltha (PITTASPHALT). | | | | | |
| Definition of | 537 | R C | | | |

| | Page. | Vol. | | Page. | Vol. |
|--|------------|--------|--|------------|---------|
| Mammoth gold mine, MacLENNAN TR., NIP. | | | Manitopeepagee lake, TIMAGAMI DIST., NIP. | | |
| Boring in, with Govt. drill.... | 4, 190 | v | Gold prospecting near..... | 176 | x |
| notes..... | 229 | v | Manitowish Lake Co. | | |
| Notes on, 1897..... | 138 | vii | Capital and date of charter..... | 41 | vii |
| Iron Mountain claim, N. OF BATCHEWANA BAY, L. SUPERIOR. | | | Gold mining by, 1898..... | 75 | viii |
| Notes on, by Coleman..... | 162, 163 | ix | island, MANITOWISH LAKE, R.R.D. | | |
| | 190 | x | Gold mining on..... | 76 | vii |
| remains. See Fossils. | | | islands, L. NIPISSING. | | |
| Manahan, Anthony | 16, 20 | ii | Crystalline limestone on... 81, 94, 95 | B xiii | |
| Mancelona, ANTRIM CO., MICH. | | | Notes on, by Barlow..... | 84 | B xiii |
| Iron foundry at..... | 340 | R C | island, L. OF THE WOODS, R. R. | | |
| Manchester, ENGLAND. | | | D..... | 186 | v |
| Arsenical poisoning in..... | 121 | xi | lake (Lower), R. R. D. | | |
| Science school at. <i>See</i> Owens college. | | | Accident when mining on..... | 27 | viii |
| Manchester, HILLSBORO CO., N. H. | | | Description and geology of.... | 62-66 | ix |
| Waterpower at..... | 485 | R C | Escarpment near, section..... | 79 | B xiii |
| Mandarin Gold Mg. Co. | | | Gold near..... | 230 | iv |
| Capital and date of charter..... | 11 | vii | <i>See also</i> Manitowish Lake dist. | | |
| Mandel, Julius | | | Iron on..... | 136 | xi |
| Formulae of steel and concrete given by..... | 175 | A xiv | Nomenclature of, Coleman's views..... | 52 | v |
| Manganese. | | | Pictographs on..... | 87 | vi |
| <i>See also</i> Pyrolusite. | | | Rocks on and near:— | | |
| Canada, production, | | | Cotichiching series..... | 47 | iv |
| 1870, 1880, 1887..... | 209 | R C | | 153 | vii |
| 1886, 1887..... | 243 | R C | Keewatin..... | 50 | iv |
| 1888..... | 525 | R C | petrography..... | 87 | iv |
| exports, 1881-87..... | 244 | R C | porphyrite..... | 84 | iv |
| Cobalt dist..... | xi | A xiii | slate..... | 86 | iv |
| Description and use of..... | 537 | R C | Trail to, from Minitaki Lake, ent by Govt..... | 10 | vi |
| For steel making..... | 363 | R C | Trout in..... | 55 | A xiii |
| Hints on, to prospectors.... | 461, 462 | R C | Water of, character..... | 55 | A xiii |
| Ores of, notes by Goodwin..... | 216 | vi | lake (Upper). See Anzhekumming lake. | | |
| United States, production..... | 525 | R C | lake, MANITOULIN ISLAND, L. HURON. | | |
| ochre. See Bog manganese. | | | Rocks on..... | 78 | B xiii |
| spar. See Rhodochrosite. | | | limestone..... | 80 | B xiii |
| Manganite. See Pyrolusite. | | | Lake dist., R.R.D. | | |
| Manhattan Cobalt Mg. Co. | | | Fahilbands in..... | 118 | vi |
| Capital and date of charter.... | 30 | A xvi | Gold mining in, notes on:— | | |
| Gold Mg. Co. | | | 1896..... | 83-87 | vi |
| Capital and date of charter..... | 9 | x | 1897... 75-77, 121-125 | vii | |
| Character of vein worked by.... | 262 | viii | 1898..... | 75, 76 | viii |
| Depth of mine of, 1899..... | 35 | ix | 1899..... | 61-63 | ix |
| Work by, 1898..... | 273 | viii | 1900..... | 97-102 | x |
| 1899..... | 70, 71 | ix | 1901..... | 244-249 | xi |
| 1900..... | 83, 84, 94 | x | 1902..... | 91-93 | xii |
| Manilla, MARIPOSA TR., VICTORIA CO. | | | 1903..... | 66-70 | A xiii |
| Marl from, analysis..... | 114 | B xiii | 1904..... | 51-53 | A xiv |
| Manistee, MICHIGAN CO., MICH. | | | 1905..... | 50-53 | A xv |
| Salt at, probability..... | 189 | R C | 1906..... | 43, 56, 57 | A xvi |
| "Manitoba" s.s. | 138 | viii | discouraging..... | 6 | Bull. i |
| Manitoba. | | | notes by Coleman..... | 53 | v |
| Agricultural land of, how formed. | | | Government roads in, notes on.. | 34 | vii |
| 91, 202 | | v | Lake Gold Mg. Co. | | |
| Consolidated gold mine, CLEARWATER, BAY, L. OF THE WOODS. | | | Capital and date of charter..... | 10 | ix |
| Discovery of..... | 118 | R C | Mineral Co. | 104 | viii |
| lake, MANITOBA. | | | | 117 | ix |
| Remnant of L. Agassiz..... | 91 | v | Mines Co. | | |
| Peat Co. | | | Capital and date of charter..... | 31 | A xvi |
| Plant erected by, at Fort Frances. | 23 | A xiv | Work by, 1906..... | 43, 14 | A xvi |
| "Manitoba." | 62 | xi | Oil and Gas Co. | | |
| | | | Capital and date of charter..... | 26 | A xv |
| | | | rapid, RAINY RIVER | 167 | v |

| | Page. | Vol. | | Page. | Vol. |
|---|-----------|-----------|--|---------------|--------|
| Manitou river, RAINY LAKE DIST. | | | Manitowaning bay, MANITOULIN ISLAND, L. HURON. | | |
| Dam across | 34 | vii | Rocks on and near | 86 | i |
| Surveyed by Coleman, 1895 | 3 | v | | 76, 78, 80 | B xiii |
| stretch, MANITOU LAKE, R.R.D. | | | Manly—? | 59 | A xvi |
| Gold mining on | 63 | ix | Mann, Dr. | | |
| Manitoulin and North Shore R'y. | | | Analysis by, of cancrinite-egyr-rite-syenite | 173 | viii |
| Rocks on, Sudbury dist. | 208 | x | D.D. | 13 | xiv |
| arkose | 92 | C xiv | | 73 | A xvi |
| granite, photo. | 82 | C xiv | <i>See also</i> Mackenzie and Mann. | | |
| greenstone | 81 | C xiv | George W. | 248 | iv |
| greywacke | 89 | C xiv | island, L. TIMISKAMING, NIP. | | |
| norite | 40 | C xiv | Fossils on | 87 | B xiii |
| photo | 80 | C xiv | Rocks on | 86 | B xiii |
| island, L. HURON. | | | Niagara limestone | 174 | ix |
| Agricultural land on | 103 | iv | tp., NIP. | | |
| Bays on, how formed | 48 | R C | Photo of Frederick House river in | 225, 226 | A xiv |
| Gas in | 140 | i | Rocks in | 198, 210, 211 | A xiv |
| Iron in, boring for with Govt. drill | 43, 45 | A xiii | Soil from and near | 246, 247 | A xiv |
| Oil in | 156, 157 | R C | Timber in and N. of 196, 224-226. | 244 | A xiv |
| | 140 | i | Waterpower in | 208 | A xiv |
| | 206 | ix | Mannheim, BADEN, GERMANY. | | |
| | 89, 97 | A xiv | Sulphuric acid made at, notes on process | 195, 196 | A xvi |
| Rocks on | 41-44 | R C | Manning, Alexander | | |
| | 86 | i | Gold mining by, L. of the Woods. | 118 | R C |
| Cambro-Silurian | 24 | B xiii | Limestone quarry of, Thorold .. | 16 | B xiii |
| limestone | 41-44, 84 | R C | and Macdonald. | | |
| analysis | 74, 76 | B xiii | Marble quarrying by, near Crookston | 80 | R C |
| for building | 93 | i | Manotick, OSGOODE TP., CARLETON CO. | | |
| burning | 94 | i | Cambro-Silurian limestones at. | 46, 47 | B xiii |
| notes by Miller | 75 | B xiii | Mansfield, J. P. | | |
| quarrying | 101 | i | Iron mining by, McNab tp. | 141 | R C |
| | 74, 78 | R C | Mantel, George | | |
| quartzite | 72 | i | Brick-making by, Crediton | 71 | B xv |
| for glass-making | 94 | i | Mantles (for gas burners). | | |
| Salt in oil wells of | 161 | R C | Zircon for | 228 | vi |
| Portland Cement Co. | | | Manual of Explosives (by DeKalb). | | |
| Capital and date of charter | 37 | A xiii | Notes on | 49 | x |
| Objects of | 80 | B xiii | Manufacturers Natural Gas Co. | | |
| Manitouwabin lake, PARRY ISL. DIST. | | | Capital and date of charter | 30 | A xvi |
| Limestone on | 93 | B xiii | Manure. | | |
| Manitowick lake, MICHIPICOTEN DIV. | | | Peat for | 215 | ii |
| Altitude of | 188 | vii | Use of liquid | 113, 144 | iii |
| Canoeing on, dangerous | 202 | A xv | Manvers tp., DURHAM CO. | | |
| Description of, by Willmott, 189. | 190 | vii | Stratified deposits in. <i>See</i> Ponty-pool. | | |
| Gold on | 11 | Bull. iii | Manxman gold mine, NEAR HIGH FALLS, MICHIPICOTEN RIVER. | | |
| mining | 101, 184 | vii | Battery installed at | 15 | xii |
| prospecting | 11 | Bull. iii | Gneissoid rock quarried in | 222 | A xiii |
| | 189 | vii | Idle, 1905 | 67 | A xv |
| Iron on | 204 | A xv | Notes on, 1901 | 238 | x1 |
| north of, probability | 257 | viii | Rocks near | 205 | A xv |
| prospecting for | 256 | viii | Terraces near | 190 | A xv |
| Length of | 7 | Bull. iii | Gold Mining Co. | | |
| Map of (sketch) | 203 | A xv | Capital and date of charter | 11 | xi |
| Minor ref. to | 176 | A xv | Gold mining by, Mabel lake | 73 | xi |
| Moraine-dammed | 9 | Bull. iii | | 64, 79 | xii |
| Monadic ridges near | 192 | A xv | | 47 | A xiii |
| Photo of | 140, 141 | vii | Licence to | 74 | xi |
| Rocks on and near | 203, 204 | vii | | 74 | xii |
| | 201, 202 | A xv | | 66 | xii |
| | 205 | A xv | | 48 | A xiii |
| diorite | 205 | A xv | Photo of plant and claim of .. | 64, 65 | A xiii |
| Route from, to Michipicoten .. | 5 | Bull. iii | | | |
| Terraces on and near | 196, 206 | A xv | | | |
| Manitowaning, MANITOULIN ISLAND, L. HURON. | | | | | |
| Limestone at, analysis | 75, 80 | B xiii | | | |

| | Page. | Vol. |
|---|----------------|--------|
| Many, E. E. | 104 | vii |
| Map(s). | | |
| Algoma dist. | | |
| Bruce Mines region | 91 | R C |
| Ickta lake | 40 | iii |
| Michipicoten div..... | with Vol. vii | |
| 106, 188, 189 | vii | |
| With Vol. xi | | |
| Goudreau and Twin lakes .. | 184 | A xv |
| Hawk and Manitouwick lakes..... | 203 | A xv |
| iron ranges | 291 | viii |
| 159 | ix | |
| With Vol. xi | | |
| " " | xiv | |
| " " | xv | |
| Mamainse pen..... | 70 | iii |
| Scott's camp | 336, 337 | A xiv |
| Wawa lake, claims | 120, 121 | viii |
| Western portion..... | 126, 127 | viii |
| Missinaibi and Sowseska rivers, lignite | 163, 165 | A xiii |
| Moose river, gypsum..... | 155 | A xiii |
| Opasatika river | 153 | A xiii |
| Algoma—Nipissing dist. | | |
| boundary line and vicinity..... | 176, 177 | vi |
| northern portion | With Vol. xiii | |
| Kenogami lake | 149 | A xiii |
| Moose and Ottawa rivers, basins of | With Vol. ix | |
| Northern portion | " " | xiii |
| Northern nickel range .. | " " | xiii |
| Sudbury dist..... | " " | i |
| " " | " " | ix |
| " " | " " | xiv |
| Blezard mine and vicinity .. | 255 | xii |
| Creighton mine..... | 45 | iii |
| Vermilion rivers, gold areas..... | 256, 257 | viii |
| <i>See also below.</i> Nipissing dist. | | |
| Canada, 1744..... | 12, 13 | B xiv |
| Hastings and Renfrew cos.:— | | |
| corundum deposits..... | 207, 208 | vii |
| index | 205 | viii |
| Iroquois lake..... | With Vol. xiii | |
| Kent co., oil and gas locations.. | 93 | A xvi |
| Mines..... | 91, 92 | R C |
| Belmont gold mine..... | 48 | iii |
| Caldwell location | 140 | R C |
| Copper Cliff mine. At end of Pt. xii | | |
| Frood and Stobie mines. | | |
| At end of Pt. xii | | |
| Golden Star mine and vicinity | 293 | viii |
| Helen iron mines..... | With Vol xi | |
| Ophir gold mine | 40 | iii |
| Regina gold mine | 180 | v |
| Whistle location | 275 | xii |
| Nipissing dist. | | |
| <i>See also above.</i> Algoma-Nipissing dist. | | |
| Boston tp..... | 261 | A xiv |
| Cobalt silver area | 96, 97 | A xiii |
| Coleman tp..... | 9, 10 | B xiv |
| Hutton iron range..... | 321 | xii |
| 217 | A xiii | |
| Iron ores..... | With Vol. xi | |
| Larder Lake dist. | 202, 203 | A xvi |
| Timagami lake, N. E. arm..... | 316 | xii |

Map(s).—Con.

Nipissing dist.—Con.

| | | |
|---|--------------|--------|
| Timiskaming Lake dist., regional disturbances | 35 | B xiv |
| Ontario — | | |
| eastern gold belt | With Vol. xi | |
| iron ranges, northern (Index). .. | 305 | xii |
| pyrites deposits..... | 151 | A xvi |
| routes travelled by R. C. | 204, 205 | R C |
| southern, geological (Index). .. | 23 | B xiii |
| western, geological..... | 155 | vii |
| Rainy River dist..... | With Vol. iv | |
| gold regions | " " | v |
| L. of the Woods dist. | | |
| Bag bay and Bald Indian bay..... | 64, 65 | viii |
| Big-stone bay, locations | 173 | v |
| Kenora and Keewatin..... | 168 | v |
| northern portion..... | 12 | iii |
| With Vol. vi | | |
| Regina bay..... | 180 | v |
| Sultana island | 15 | iii |
| Manitou Lake dist..... | With Vol. iv | |
| meridian and base line..... | 172, 173 | vii |
| New Klondike dist..... | 80 | vii |

| | | |
|---|--------------|-------|
| Thunder Bay dist. | | |
| Animikie iron range | With Vol. xv | |
| Black Sturgeon lake, iron locations | 312 | xii |
| Couture lake | 96, 97 | xii |
| iron ranges E. of L. Nipigon..... | 108, 109 | A xvi |
| Moss tp..... | 122 | v |
| Nipigon lake, iron locations near..... | 310 | xii |
| Sturgeon lake | 39 | x |
| Value of, to prospectors | 423 | R C |
| York Branch river, Murray, 1853. | 219 | viii |

Map(s), REFERENCES TO

| | | |
|------------------------------------|--------|-------|
| Cobalt silver dist..... | 14 | A xvi |
| Methuen tp. (1822-3) | 207 | viii |
| Ontario, for Pan-American Ex..... | 84, 85 | xi |
| Rainy River dist., gold regions .. | 3 | v |
| Timiskaming Lake dist..... | 6 | B xiv |

Maple.

| | | |
|--|-------------------------|--------|
| Blanche River region..... | 179-182 | xii |
| Fort Frances | 161 | v |
| Heating power of | 54 | B xv |
| Hudson Bay slope..... | 121 | iv |
| L. Huron slope..... | 170 | vi |
| McCann tp..... | 249 | A xiv |
| Michipicoten div..... | 13 Bull. | iii |
| 206 | vii | |
| 200 | A xv | |
| Mamainse pen..... | 72 | iii |
| Michipicoten island..... | 61 | R C |
| Mississagi dist..... | 166, 172 | xii |
| Rainy Lake dist..... | 96 | iv |
| Rainy river..... | 117 | iv |
| Speight's meridian line, E. of L. Superior | 123, 150, 197, 199, 202 | viii |
| Sudbury dist., Fairbank tp | 105 | C xiv |
| mountain | | |
| Abitibi dist | 126 | A xiii |
| 242 | A xiv | |
| Mattagami valley..... | 150 | A xv |
| Michipicoten div..... | 189, 191 | vii |
| 296 | A xiv | |
| Moose River basin | 176 | A xiv |

| | Page. | Vol. | | Page. | Vol. |
|--|---------------|--------|--|--------------|--------|
| Maple, soft | | | Marble.—<i>Con.</i> | | |
| Abitibi dist. | 126 | A xiii | Sault Ste. Marie dist. | 205 | R C |
| Michipicoten div. | 296 | A xiv | Garden river, evidence before | | |
| sugar or rock | | | R. C. .68, 83 | | R C |
| Brule lake, Th. B. d. | 205 | V | notes by Merritt. 76 | | R C |
| Michipicoten div. | 296 | A xiv | quarry. ....122, 123 | | viii |
| Timagami Lake dist. | 57 | R C | lake, BARRIE TP., FRONTENAC | | |
| borer. | | | CO | | |
| Night-Hawk lake | 129 | A xiii | Meneghinite on. | 194 | ii |
| City Oil and Gas Co. | | | Rocks on. | 202 | xi |
| Capital and date of charter. | 28 | A xvi | basic dikes. | 219 | V |
| Operating, Kent co., 1906-97, 99, 102 | A xvi | | mica schists. | 101 | B xiii |
| island, MAGANATAWAN RIVER, | | | rapid, MARBLE LAKE, MISSISS- | | |
| P. S. D. | | | IPI RIVER. | 220 | V |
| Limestone on. | 94 | B xiii | rock, GANONOQUE RIVER. | | |
| lake, FLOATING-HEART CREEK, | | | Pleistocene deposits near. | 241 | A xiii |
| L. SUPERIORE. | | | Marblehead. | | |
| Rocks on and near. | 349 | A xiv | Pyroxenes and feldspars at. | 138 | R C |
| cherts. | 316 | A xiv | Marcasite. | | |
| iron formation. | 336 | A xiv | Annaberg, Saxony. | 61 | R xiv |
| Trees near. | 206 | A xiv | Determination of. ....203, 204, 220 | | vi |
| "Maple Leaf" ss. | 52, 160 | V | Dinorwic, near. | 125 | vii |
| Maple Leaf Gold Mfg. Co. | | | Ilarcourt tp. | 48 | xi |
| Capital and date of charter. | 10 | vii | Hardness of. | 202 | vi |
| mt., W. OF LADY EVELYN LAKE, | | | Joachimsthal, Bohemia. | 61 | B xiv |
| NIP. | 72 | i | Occurrences of. | 203 | ix |
| pt., MANITOULIN ISLAND, L. | | | Port Arthur dist. | 54, 55, 58 | B xiv |
| HURON. | | | exhibited at World's Fair. | 187 | ii |
| Oil at. | 72 | A xv | Silver islet. | 86 | v |
| Rocks at. | 77 | B xiii | Specific gravity of. | 202 | vi |
| Mappin, Sir T. | 247 | i | Sudbury dist., Murray m. | 281 | xii |
| Maquenne, Leon | 144 | iv | Worthington m. | 158 | C xiv |
| Mara tp., ONTARIO CO. | | | Marcellus shales. | | |
| Trenton formation in. | 89 | B xiii | Composition of. | 99 | A xiv |
| Marbeau. | | | Marchantia polymorpha. | | |
| Nickel-alloy discoveries by. | 382 | R C | Abitibi Lake dist. | 242 | A xiv |
| 145 | | ii | Margach, William | | |
| 175, 176 | C xiv | | Crown Timber agent. | 47 | v |
| Marble. | | | Evidence by, before R. C. <i>see</i> — | | |
| Actinolite, Ont. | 200, 204 | xi | free-trade. | 233 | R C |
| 86 | | xii | iron, Port Arthur dist. | 144 | R C |
| Bancroft, near, quarry. | 107 | A xv | U. S. location system. | 311 | R C |
| 82 | A xvi | | Minor ref. to. | 231, 232 | ii |
| Barrie tp. | 220 | V | Trustee, mineral collection, | | |
| Canada, production, 1886-87. | 243 | R C | Kenora. | 200 | vi |
| Definition of. | 69, 537 | R C | Work by, 1893. | 40 | iv |
| Duty on, effect of. | 217, 235, 236 | R C | Margach, NEAR ROSSLAND, R. R. D. | | |
| into United States. | 82, 228 | R C | Gold mining near. <i>See</i> Bad gold | | |
| Evidence <i>re</i> , before R. C. | | | mine | | |
| 68, 69, 80-84 | | R C | Margaret lake, NEAR STEEP-ROCK | | |
| Exhibit of, at World's Fair. | 186 | ii | LAKE, R. R. D. | | |
| Gypsum constituted for. | 280 | vi | Rocks on. | 72 | V |
| Madoc tp., evidence before R. C. | | | Mg. Co. | | |
| 80, 81, 235 | | R C | Capital and date of charter. | 26 | A xv |
| Madoc (near). | 204 | xi | Marginal deposits. | | |
| notes by Chapman. | 81 | R C | Sudbury dist., notes by Coleman. | | |
| New York and Vermont, com- | | | 19, 20 | C xiv | |
| pared with Hastings co. | 80 | R C | Marie Louise lake, N. OF L. SU- | | |
| Nipigon river. | 233 | R C | PERIOR, TH. B. D. | 137 | vi |
| Notes on. | 11 | B xiii | Marin, Capt. Nicholas. | 188, 189 | V |
| by Merritt. | 75, 76 | R C | Marine City, ST. CLAIR CO., MICH. | | |
| Miller. | 11, 12 | B xiii | Salt at. | 55, 187, 190 | R C |
| Ontario, quality in eastern. | 234 | vii | shells. | | |
| Renfrew co., evidence before | | | McGregor lake, N. of Ottawa, al- | | |
| R. C. | 82, 83 | R C | titude. | 216 | X |
| notes by Merritt. | 76 | R C | Marion, CRITTENDEN CO., KEN. | | |
| | | | Cobalt and nickel near. | 71 | B xiv |

| | Page. | Vol. |
|---|----------|--------|
| Marion, GRANT CO., IND. | | |
| Natural gas in, depth and pressure..... | 155 | i |
| lake, PART OF PYRRHOTITE LAKE, MICHIGICOTEN DIV. | | |
| Length of..... | 294 | A xiv |
| Rocks near, iron-bearing..... | 315 | A xiv |
| notes..... | 306 | A xiv |
| lake, S. OF MATAGAMING LAKE, ALG. | | |
| Rocks on..... | 106 | xii |
| Mariposa gold claim, MICHIGICOTEN DIV., ALG. | | |
| Idle, 1905..... | 67 | A xv |
| Notes on, 1900..... | 139 | x |
| 1902..... | 65, | 80 |
| 1903..... | 47 | A xiii |
| Mining Co. | | |
| Capital and date of charter..... | 9 | xii |
| Gold mining by, Michipicoten div..... | 65 | xii |
| tp., VICTORIA CO. | | |
| Marl in. <i>See</i> Manilla. | | |
| Markdale, GLENELG TP., GREY CO. | | |
| Terrace near, altitude..... | 177 | ix |
| Markwell, Clinton | 53 | vii |
| Marks, George T. | 134 | vii |
| | 85 | ix |
| Samuel A. | 206 | v |
| Thomas | | |
| Evidence by, before R. C. <i>re</i> — | | |
| building-stone, L. Huron..... | 79 | R C |
| forest fires..... | 311 | R C |
| free-trade..... | 236 | R C |
| technical education..... | 429 | R C |
| Iron prospecting by, Atikokan range..... | 76 | ij |
| Loon lake..... | 254 | A xiv |
| Marl. | | |
| Analyses of, used by cement cos..... | 183 | A xiv |
| Composition of..... | 120 | A xiv |
| Definition of..... | 512 | R C |
| For making carbon-di-oxide..... | 5 | B xiii |
| cement..... | 18 | B xiii |
| whiting..... | 14 | B xiii |
| Localities supplying cement works..... | 133-162 | A xiv |
| New Jersey, U. S., production, 1888..... | 525 | R C |
| Occurrences of..... | 121, 122 | A xiv |
| Paper on, by Gillespie..... | 119-123 | A xiv |
| <hr/> | | |
| Addington co., Sheffield tp..... | 28 | B xiii |
| Black bay, L. Superior, associated with galena..... | 36 | R C |
| Brant co..... | 34 | B xiii |
| Brant tp..... | 37 | B xiii |
| Dumfries tp., Blue lake..... | 33, 149 | xii |
| Bruce co., Carriek tp..... | 37 | B xiii |
| Carleton co..... | 39 | B xiii |
| Dufferin co., Garafraxa tp., E..... | 16 | x |
| Emerald lake, near L. Timiskaming..... | 87 | B xiii |
| Frontenac co..... | 43 | B xiii |
| Loughborough tp..... | 46 | B xiii |

| | Page. | Vol. |
|---|----------|--------|
| Marl. — <i>Con.</i> | | |
| Grey co..... | 50 | B xiii |
| analysis..... | 51 | B xiii |
| Durham..... | 17 | x |
| Shallow lake..... | 108 | ix |
| | 31, | 32 |
| Wilder lake..... | 32 | xii |
| | 32 | xi |
| | 32 | xii |
| Williams lake, analysis..... | 108 | ix |
| Hastings co..... | 59 | B xiii |
| Marlbank..... | 109 | ix |
| analysis..... | 16 | x |
| White lake..... | 66, | 106 |
| Lanark co., Lavant tp..... | 71 | B xiii |
| Manitoulin island..... | 76 | B xiii |
| Ice lake..... | 80 | B xiii |
| Montreal river, N. of northern arm, analysis..... | 209 | A xiv |
| Moose river..... | 127 | iv |
| Ontario co..... | 90 | B xiii |
| Peterborough co., Buckley lake..... | 17 | x |
| Pitikigouching river, analysis..... | 112 | B xiii |
| Port Arthur-Duluth railway, along..... | 111 | B xiii |
| Renfrew co..... | 106 | B xiii |
| Mink lake..... | 107 | B xiii |
| Ross tp..... | 107 | B xiii |
| Thunder Bay, quarried..... | 170 | A xv |
| Victoria co., Manilla, analysis..... | 114 | B xiii |
| Waterloo co., Berlin..... | 191 | i |
| Dumfries tp., N..... | 115, | 116 |
| Blue lake..... | 17 | x |
| | 32 | xi |
| Wellington co., analysis..... | 122 | B xiii |
| Westmeath tp., analysis..... | 107 | B xiii |
| Marland, Neely, & Co. | 120 | ii |
| Marlbank, HUNGERFORD TP., HASTINGS CO. | | |
| Cement at and near..... | 109 | i |
| <i>See also</i> Canadian Portland Cement Co. | | |
| Works at..... | 170 | iv |
| | 31, 32 | xii |
| | 17, 18 | B xiii |
| | 137, 138 | A xiv |
| Marl at..... | 59 | B xiii |
| analysis..... | 16 | x |
| and clay from..... | 109 | ix |
| Marmora, HASTINGS CO. | | |
| Asbestos from, exhibited at World's Fair..... | 139 | ii |
| Geology of vicinity..... | 194 | xi |
| Gold near, mining, (idle)..... | 236 | iv |
| stamp battery, notes..... | 224 | i |
| | 237 | ii |
| | 236 | iv |
| plans and notes..... | 56-61 | iii |
| Iron ore in..... | 36-39 | ii |
| notes by Vennor..... | 41, 42 | ii |
| <i>See also</i> Seymour iron bed. | | |
| smelter..... | 191 | ii |
| | 204 | vi |
| cost..... | 321 | R C |
| history..... | 14-21 | ii |
| notes by Hardy..... | 321-323 | R C |
| statements before R. C..... | 389 | R C |

| | Page. | Vol. |
|--|-------------|--------|
| Marmora, HASTINGS CO. — <i>Con.</i> | | |
| Lithographic stone near..... | 204 | xi |
| analysis..... | 61 | B xiii |
| exhibited at Pan-American | 88 | xi |
| Exhibition..... | 215, 216 | v |
| Mining class at..... | 260 | vii |
| Zinc-blende near..... | 38 | iv |
| Foundry Co. | | |
| History of..... | 21 | ii |
| Gold and Iron Mg. Co. | | |
| Capital and date of charter..... | 10 | vii |
| Iron Works Co. | | |
| Cost of iron production by..... | 331 | R C |
| Exhibition of, in London, 1851..... | 33 | ii |
| Notes on, by Hardy..... | 322, 323 | ii |
| Macfarlane..... | 322 | R C |
| Section of river banks at plant of. | 59, 60 | B xiii |
| Iake, HASTINGS CO. | | |
| Lithographic stone on..... | 53 | R C |
| Reduction Co. | | |
| Capital and date of charter..... | 11 | vii |
| Notes on plant..... | 236 | iv |
| tp., HASTINGS CO. | | |
| Arsenical ores in..... | 52 | iii |
| 113 | vi | |
| 205 | ix | |
| 102-105 | xi | |
| mined..... | 97 | iii |
| notes..... | 196, 197 | xi |
| percentage..... | 237 | iv |
| production, 1885-1901..... | 111 | xi |
| <i>See also below, Gold.</i> | | |
| Atlas Arsenic Co. | | |
| Deloro g. m. | | |
| Epidote and epsomite in..... | 198 | ix |
| Galena and garnet in..... | 198 | ix |
| Gold in..... | 199 | ix |
| evidence before R. C..... | 65, 66, 110 | R C |
| mining..... | 53 | iii |
| 263, 264 | v | |
| <i>See also Cook Land Co.</i> | | |
| Pearce g. m. | | |
| notes by Bell..... | 28 | R C |
| Rothwell..... | 107 | R C |
| prospecting..... | 263 | v |
| Graphite in..... | 199 | ix |
| Iron ore in..... | 31 | ii |
| exhibited in London..... | 31-33 | ii |
| World's Fair..... | 82 | ii |
| estimate of quantity..... | 35 | ii |
| hematite..... | 199 | ix |
| magnetite..... | 202 | ix |
| quality..... | 191 | ii |
| mining, 1891..... | 237 | i |
| siderite..... | 209 | ix |
| Lepidomelane in..... | 201 | ix |
| Lithographic stone in..... | 41, 43 | R C |
| analysis..... | 213 | viii |
| mining..... | 61 | B xiii |
| notes by Volney..... | 183, 184 | ii |
| Malachite in..... | 202 | ix |
| Melanite in..... | 203 | ix |
| Minerals found in, list of..... | 193, 194 | ii |

| | Page. | Vol. |
|--|----------|--------|
| Marmora tp., HASTINGS CO. — <i>Con.</i> | | |
| Rocks in, greenstone dikes..... | 15 | v |
| marble..... | 62 | B xiii |
| serpentine..... | 209 | ix |
| Sphalerite in..... | 209 | ix |
| Stibnite in..... | 190 | ii |
| 210 | ix | |
| Marmot. | | |
| Moose River basin..... | 178 | A xiii |
| Marquette Iron range, MICH. | | |
| Chert in, ferruginous..... | 185 | ix |
| Geological nomenclature..... | 270 | A xiv |
| Iron ore in..... | 20 | R C |
| compared with that of Michipi- | | |
| coten div..... | 195-197 | x |
| hematite..... | 64 | ii |
| notes by Coe..... | 467 | R C |
| production, 1884-88..... | 226 | R C |
| 1892-3..... | 146 | iii |
| Jaspilites of..... | 166 | x |
| Notes on, by Coleman..... | 150-152 | ix |
| Marseilles, FRANCE. | | |
| Nickel refinery near..... | 151 | ii |
| Marshore bed, MARMORA TP., HAST- | | |
| INGS CO. | | |
| Magnetite and pyrrhotite of..... | 197 | xi |
| Marshall, D. H. | | |
| Peter..... | 39, 41 | A xiii |
| William | | |
| Brick-yard of, Woodstock..... | 86 | B xv |
| Foundry Co. | | |
| mills, AUSABLE RIVER. | | |
| Hamilton formation at..... | 155 | xii |
| 69 | B xiii | |
| Shales at, for pottery..... | 156 | xii |
| 70 | B xiii | |
| Marshfield, COLCHESTER TP., ESSEX | | |
| CO. | | |
| Artesian wells in..... | 59 | i |
| Natural gas in..... | 120 | i |
| Marshy lake, VERMILION RIVER. | | |
| Character of..... | 223 | xi |
| Gold prospecting in..... | 256 | viii |
| 151-154 | x | |
| Minor ref. to..... | 168 | vi |
| Striae on, direction..... | 181 | vi |
| Martel (or WILSON) iron mine, | | |
| BAGOT TP., RENFREW CO. | | |
| Notes on, by Grady..... | 136 | R C |
| Ore from, for Pennsylvania..... | 191 | iii |
| Marten. | | |
| Abitibi dist..... | 193 | viii |
| 189 | xii | |
| 127 | A xiii | |
| 242 | A xiv | |
| Hinterland, The..... | 133 | iv |
| Mattagami valley..... | 131 | A xv |
| Michipicoten div., rare..... | 297 | A xiv |
| Timagami Lake dist..... | 58 | R C |
| Marter tp., NIP. | | |
| Rocks in..... | 216, 217 | xi |
| Sand-hills in..... | 225 | xi |
| Martha mica mine, N. BURGESS TP., | | |
| HASTINGS CO. | | |
| Notes on, 1893..... | 194 | iii |
| 1901..... | 290 | xi |
| 1902..... | 128, 129 | xii |
| 1905..... | 104, 105 | A xv |
| Operating, 1906..... | 23, 89 | A xvi |

| | Page. | Vol. | | Page. | Vol. |
|--|---------------|--------|---|--------|--------|
| Martin, —? (1850)..... | 174 | ii | Maskinonge lake, NIP. | | |
| C. E. | | | Slates between and Round lake. | 73 | i |
| Gold mining by, Michipicoten | | | river, STURGEON RIVER, NIP. | | |
| div..... | 73, 74 | xi | Character, depth and width of... | 176 | vii |
| | 66 | xii | Maskinonge-Wagaming LAKE, TIMA- | | |
| D. | | | GAMI DIST., NIP. | | |
| Brick-yard of, Thamesville..... | 73 | B xv | Roofing slate on | 93 | i |
| H. G. | 104 | vii | Mason, C. | | |
| | 104 | viii | Brick-making by, Carlton West.. | 107 | B xv |
| | 117 | ix | Simcoe..... | 29 | xii |
| | 142 | x | | 85 | B xv |
| S. B. | 75 | A xiii | John | | |
| William | 201, 210-213, | 244 | Iron smelting by, 1813...319, 320, 327 | | R C |
| & Co. | | iv | 13 | | ii |
| Brick-yard of, Alvinston..... | 74 | B xv | William | 263 | vii |
| falls, ALBANY RIVER. | | | Science college, BIRMINGHAM, | | |
| Albany river navigable as far as.. | 103 | iv | ENGLAND. | | |
| Character of river below | 111 | iv | Notes on, by Richards..... | 512 | R C |
| | 111 | B xiii | "Massachusetts" ss..... | 224 | ix |
| Coal near..... | 125 | iv | Massachusetts, U.S. | | |
| gold mine, COUTURE LAKE, | | | Corundum in..... | 241 | viii |
| TH. B. D..... | 86 | xii | Institute of Technology. | | |
| Martindale, Frederick | 112 | i | Notes on, by Mathers..... | 503 | R C |
| Thomas | | | Richards..... | 510 | R C |
| Gypsum mining by, Oneida tp... 122 | | R C | system employed at..... | 417 | R C |
| 1891..... | 112, 242, | 243 | Massagamashine lake, S. of L. NIP- | | |
| 1892..... | 253 | ii | GOX, TH. B. D. | | |
| 1893..... | 199 | iii | Gabbro on..... | 296 | xii |
| 1894..... | 251 | iv | petrography..... | 182 | ix |
| 1895..... | 282 | v | Massasauga pt., BAY OF QUINTE, | | |
| <i>See also</i> Martindale gypsum mine. | | | L. ONTARIO. | | |
| gypsum mine, ONEIDA TP., | | | Black River formation at..... | 27 | B xiii |
| HALDIMAND CO. | | | Massassaga lake, FRONTENAC CO. | | |
| Analysis of gypsum from..... | 56 | B xiii | Gold mining near. <i>See</i> Big | | |
| Idle, 1897..... | 100 | vii | Dipper mine. | | |
| Notes on, 1896..... | 280 | vi | Massenez, Joseph | | |
| Martineau bay, L. TIMISKAMING. | | | Inventor of Hoerde process..... | 92 | ii |
| Rocks near..... | 48 | B xiv | Massey, H. A. | | |
| Martinique, Island of | | | Evidence by, <i>re</i> the iron trade. | | |
| Disaster at, caused by gas..... | 93 | A xiv | 330, 401 | | R C |
| Martino, Guiliano | 29 | A xv | creek, WANAPITEI LAKE, NIP. | | |
| Martite. | | | Gold on, reported..... | 256 | vii |
| Bass lake..... | 194 | ii | Nickel range on..... | 202 | xi |
| | 203 | ix | Rocks on and near..... | 73 | C xiv |
| Dalhousie tp..... | 202 | ix | diabase dike..... | 203 | A xiii |
| Marvin, John J. | 152, 156, | 157 | nickel bearing..... | 202 | A xiii |
| Maryborough tp., WELLINGTON CO. | | | Station, SALTER TP. | | |
| Onondaga limestone in..... | 122 | B xiii | Agricultural land near..... | 103 | iv |
| Maryland, U. S. | | | Copper near | 37 | x |
| Amount of land in, that may be | | | mining. <i>See</i> Massey Station m. | | |
| held..... | 284 | R C | Concentration by oil-process at, 11, 44 | | A xiv |
| Marymount, Abraham | 93 | ix | Diabase (?) near, description.... | 107 | xii |
| Marysburg tp., PRINCE EDWARD CO. | | | Mining Agency at, report on, | | |
| Terrace in. <i>See</i> Cressy and | | | 1900....146, 147 | | x |
| Waupoos. | | | 1901..... 81, 82 | | xi |
| Marysville, TYENDINGAGA TP., HAST- | | | Saugeen clay near..... | 22 | B xv |
| INGS CO | | | Slate near..... | 93 | C xiv |
| Altitude of..... | 222 | x | Water-power near. <i>See</i> Sable | | |
| Marysville, WOLFE ISLAND, L. ONT- | | | river. | | |
| ARIO. | | | Station copper mine, MASSEY | | |
| Limestone near, fossiliferous.... | 44 | B xiii | STATION, ALG. | | |
| Mascotte gold mine. <i>See</i> La Mascotte. | | | Accident at..... | 56, 57 | xi |
| Masillon, misprint for Massillon. | | | 31-33 | | A xv |
| Maskinonge, ROUND LAKE, OTTO TP., | | | Elmore concentrating plant at...11, 44 | | A xiv |
| NIP..... | 189 | xii | Mining class at..... | 51 | A xiii |
| lake, W. OF MINNITARI LAKE, | | | 41 | | A xiv |
| R.R.D. | | | Minor ref. to..... | 58 | A xiii |
| Character of country near..... | 176 | vii | Notes on, 1900..... | 120 | x |
| Clay area near..... | 182 | vii | 1901..... | 267 | x |
| Rocks on and near..... | 170, 182 | vii | 1902..... | 97, 98 | xi |

| | Page | Vol. | | Page | Vol. |
|--|-------------------|--------|--|---------------|--------|
| Massey Station copper mine. — <i>Con.</i> | | | Matawin river. — <i>Con.</i> | | |
| Notes on, 1903..... | 78, 79 | A xiii | Rocks of, similar to iron forma- | | |
| 1904..... | 60, 61 | A xiv | tion of Michipicoten..... | 151, 154 | ix |
| 1905..... | 67 | A xv | Storm on..... | 119 | v |
| 1906..... | 68 | A xvi | Surveyed by Coleman, 1895..... | 3, 4 | v |
| Ores of, treated at Victoria mines. | 72 | A xiv | Waterpower on..... | 133 | v |
| Photo of..... | 96, 97 | A xiii | | 252 | vii |
| | 61 | A xiv | Match, Albert | 56, 57 | xi |
| Sulphide deposits in..... | 11 | A xiv | Matchedash bay , GEORGIAN BAY, L. | | |
| Station Mg. Co. | | | HURON. | | |
| Capital and date of charter..... | 11 | xi | Minor refs. to..... | 198 | v |
| Exhibit of, at Pan American | | | | 89 | B xiii |
| Exhibtn..... | 82 | xi | Trenton limestone on..... | 41 | R C |
| Work by, Salter tp..... | 81, 267 | xi | Matches. | | |
| Massillon, STARK CO., OHIO. | | | Peat fibre for, in lieu of wood... | 215 | ii |
| Coal of..... | 201 | i | Matchett—? | 98 | vii |
| calorific power..... | 207 | ii | Matchinini, Alexander (INDIAN)... | 129 | viii |
| Masson, L. R. | 197, 198 | v | Mather, John | 120 | vii |
| Master Jack gold mine , BLINDEFOLD | | | | 101 | x |
| LAKE, L. OF THE WOODS. | | | R. A. | 99 | viii |
| Notes on..... | 111 | vii | William | | |
| Matabitchuan river , TIMISKAMING | | | Report by, on technical schools | | |
| LAKE, NIP. | | | in U.S. (extracts)..... | 502-509 | R C |
| Fall on, between Rabbit and Bass | | | timber limit , L. OF THE | | |
| lakes..... | 174 | ix | WOODS, R.R.D.,..... | 14, 21 | iii |
| Minor refs. to..... | 172, 173 | ix | Matheson, A. | 104 | vii |
| Norway pine on..... | 58 | R C | Alexander , (H.B.C.) | | |
| Slates on..... | 73 | i | Evidence by, before R.C. <i>re</i> :— | | |
| for roofing..... | 56 | R C | Custom mill, L. of the Woods. | 427 | R C |
| | 93, 168 | i | Winnipeg Consolidated mine. | | |
| Striae on, direction..... | 178 | ix | | 117, 446 | R C |
| Matachewan lake , MONTREAL RIVER. | | | ref. to..... | 20 | iii |
| Glacial deposits near..... | 183 | vi | Mica mining by, L. of the Woods. | 64 | R C |
| Matagama, ALG. <i>See</i> Metagama. | | | Notes by, on Kenora..... | 170 | v |
| pt. , L. TIMAGAMI, NIP. | | | Charles Albert | | |
| Iron ore on..... | 201 | x | Peat making by..... | 23 | ix |
| notes by Miller..... | 168, 169 | x | T. G. | 55 | i |
| Matane, MATANE CO., QUE. | | | and Co. | | |
| Peat at..... | 198 | ii | Promoters of Canadian Gold- | | |
| Matastagan lake , S.E. OF RICE | | | fields..... | 58 | vi |
| LAKE, ALG. | 131 | ix | apatite mine , N. BURGESS TP., | | |
| Matawagogig lake , ABITIBI DIST. | | | LANARK CO. | | |
| Pine on..... | 119 | iv | Evidence <i>re</i> , before R.C..... | 174 | R C |
| Matawapiki , LADY EVELYN LAKE, | | | bay , L. OF THE WOODS, R.R.D. | 9 | vi |
| NIP. | | | tp. , ALG. | | |
| Minerals on..... | 24, 25 | B xiv | Soil and timber of..... | 108, 125, 134 | A xiii |
| argentiferous galeena..... | 101 | A xiii | Mathieson, Rev. D. | | |
| Matawatchan tp. , KENFREW CO. | | | Geological Survey of Canada | | |
| Muscovite in..... | 205 | ix | suggested by..... | 220 | i |
| Matawin iron range , TH. R.D. | | | Mathieu—? | | |
| Boring in..... | 35 | x | Process of, for charcoal furnaces. | | |
| | 25, 58 | xi | | 481, 482 | R C |
| Notes by Blue..... | 130-132, 210, 211 | v | Matilda tp. , DUNDAS CO. | | |
| Miller..... | 309 | xii | Limestone in. <i>See</i> Iroquois. | | |
| Ore of, in Keewatin formation..... | 30 | B xiv | Moraine drift in. <i>See</i> Irena. | | |
| Report on, by Coleman..... | 80-84 | v | Mattagami lake , MATTAGAMI RIVER, | | |
| Supply of ore of, undoubted..... | 86 | ii | MOOSE RIVER. | | |
| river , SHEBANDOWAN LAKE | | | Agricultural land near..... | 114 | iv |
| DIST. | | | Chalcopyrite on..... | 196 | ix |
| Alluvial clay and sand on..... | 84 | v | Gold on..... | 141 | ix |
| stratified..... | 146 | xi | Gravel beds on..... | 210 | x |
| Glacial striae on..... | 89 | v | Notes on, by Bell..... | 76 | i |
| Iron ore on..... | 123 | iv | Coleman..... | 181, 182 | x |
| | 276 | v | northern branch..... | 127 | ix |
| associated with jasper..... | 163 | ix | Pine on..... | 120 | iv |
| boring for..... | 88 | ix | Rocks on, and near, Huronian.. | 18 | R C |
| mining, notes by Blue..... | 132 | v | | 124 | iv |
| notes by H. L. Smith..... | 76 | ii | volcanic conglomerate..... | 141 | ix |
| <i>See also</i> Matawin iron range. | | | | | |

| | Page | Vol. | | Page | Vol. |
|--|----------------|--------|--|---------------|------|
| Mattagami river, MOOSE RIVER. | | | Mattagamashing lake.—<i>Con.</i> | | |
| Agricultural land along and near | 207 | A xiv | Gold mining on and near, 1897. | 140, 141 | vii |
| report by Henderson | 136-155 | A xv | <i>See also</i> Crystal g.m. | | |
| Clay ironstone on | 52 | ii | stamp-mill on | 87 | vii |
| | 32 B | xiii | Photo. of part of | 124, 125 | vii |
| Country between, and Moose | | | Quartzites on, feldspathic | 72 | i |
| river, description | 114 | iv | Mattagamishing lake, MONTREAL | | |
| Explorations on, report by Kerr. | | | RIVER. <i>See</i> Bay lake. | | |
| | 116-135 | A xv | Mattamasagami lake, TH. B.D. | | |
| Forest fires on | 177 | A xiii | Rocks on and near | 124 | iv |
| Fossils on, marine | 51 | R C | Mattawa, NIP. | | |
| Iron ore on | 317 | xii | Agricultural land near | 103 | iv |
| | 9 A | xiii | Country between, and Winnipeg. | | |
| analyses and notes | 126 | iv | <i>See also</i> Woodland div | 108 | iv |
| limonite | 138, 152-154 | A xiii | Distance from, to Ingolf | 193 | v |
| pyrites | 128 | iv | Iron ore in dist. of | 61 | R C |
| | 180, 181 | A xvi | Mining class at | 282 | viii |
| geological relationship | 182 | A xvi | Trenton formation near | 84 B | xiii |
| spathic | 77 | ii | Mattawan river, MONTREAL RIVER, | | |
| Length of | 103 | iv | L. SUPERIOR. | | |
| Lignite on | 70 | R C | Notes on, by Charlton | 200 | viii |
| | 125 | iv | Route from, to Dalton, notes | 199 | viii |
| Minor ref. to | 201 | v | river, OTTAWA RIVER. | | |
| Notes on, by Coleman | 181, 182 | x | Area of Ontario south of | 182 A | xvi |
| | McMillan | 186 A | Mattawin Iron Mg. Co. | | |
| Parks | 127 | ix | Capital and date of charter | 11 | vii |
| Ochres on | 128 | iv | Govt. drill lent to | 58, 60 | xi |
| Photo of portion | 129, 130, 137, | 145 A | Locations of, notes on | 130, 131 | v |
| Portages on | 105 | iv | position | 82 | v |
| Rocks on and near | 121 A | xiii | Notes on work by | 130-132 | v |
| chloritic-schists | 120 A | xiii | river AND range, TH. B. D. | | |
| diabase | 76 | i | <i>See</i> Matawin. | | |
| glacial age | 143 A | xiii | Mattawishquaia river, MISSISSAUGA | | |
| limestone, Corniferous | 17 | R C | RIVER, ALG. | | |
| fossiliferous | 32 B | xiii | Granite on, petrography | 209 | x |
| quartz-porphry | 210 A | xiv | Minor refs. to | 195 | viii |
| petrographical notes | 134 A | xv | | 145 A | xiii |
| soapstone | 81 | i | Matte (NICKEL). | | |
| Route from, to Night-hawk lake, | | | Norway, analysis | 154 C | xiv |
| description | 129 | ix | Sudbury dist. analysis | 380 | R C |
| | 105-108 A | xiii | | 154 | ii |
| Soil along | 176 A | xiii | | 152 C | xiv |
| <i>See also</i> above. Agricultural | | | Matthews, Oliver | | |
| land. | | | Copper mining by, L. Superior, | | |
| Trees on | 220 A | xiv | 1848 | 171-173 | i |
| Tributaries of, notes by Kerr | 117-124 | A xv | W. A. | | |
| Valley of, notes by McMillan. | | | Copper mining by, Michipicoten | | |
| | 188-190, 195 A | xiv | island | 103 | R C |
| terraced | 147 A | xiii | Director of Marmora Foundery | | |
| Water of, clear | 190 | viii | Co. | 21 | ii |
| Waterpower on | 252 | vii | iron mine. <i>See</i> Yankee iron | | |
| | 142 | ix | mine. | | |
| | 145 A | xiii | Mattson, Samuel. | 201, 206, 207 | iv |
| | 128, 129 A | xv | | 31 | vii |
| Mattagamish lake, MICHIGICOTEN | | | Mauch Chunk, CARBON CO., PENN. | | |
| DIV., ALG. | | | Analysis of anthracite from | 5 Bull. | ii |
| <i>See also</i> Lochalsh. | | | Minor refs. to | 41 | i |
| Rocks on | 253 | v | | 118 | ii |
| lake, S. OF GROUND-HOG LAKE, | | | Maud lake, L. OF THE WOODS REG., | | |
| ALG. | | | R. R. D. | | |
| Description of, and vicinity | 132 | ix | Notes on, by Coleman | 116 | vii |
| Forest fires on | 141 | ix | Maw, John | | |
| Pine on | 141 | ix | Gold mining by, The New Klom- | | |
| Rocks on | 106 | xii | dike | 74 | viii |
| Waterpower on | 142 | ix | | 102 | x |
| Mattagamashing lake, E. OF WAN- | | | Maxim, Hiram S. | | |
| APITEI LAKE, NIP. | | | On electrical power for railways. | | |
| Conglomerates on | 203 | x | | 133, 134 | v |

| | Page. | Vol. | | Page. | Vol. |
|--|------------|--------|--|--------------|--------|
| Maxse, Sir Henry | 221 | i | Medina formation.—<i>Con.</i> | | |
| Maxwell, C. F. | 117 | ix | Gas in..... | 4 | i |
| James. | 142 | x | boring for..... | 130-138 | i |
| gold claim, LARDER LAKE. | 27 | ix | theory of..... | 156, 157 | i |
| <i>See</i> Harris-Maxwell gold claim. | | | Notes and occurrences..... | 128 | iii |
| May, E. | 104 | viii | by Bell..... | 43 | R C |
| ..... | 117 | ix | Ohio..... | 156 | i |
| ..... | 142 | x | comparison with Canadian..... | 119 | iii |
| ..... | 74 | xi | Oil in, thickness of formation.... | 96 | A xiv |
| ..... | 66 | xii | yield..... | 23 | A xvi |
| ..... | 48 | A xiii | Position of, in Silurian..... | 2 | R C |
| Jane | 74 | xi | \|\| |  |  |
| W. J. | 340 | xii | Bruce co..... | 35 | B xiii |
| tp., ALG. | | | Dufferin co., Mono tp..... | 99, 100 | i |
| Copper prospecting in..... | 68 | A xv | Haldimand co., Caledonia..... | 128 | i |
| Granite in..... | 69 | i | ..... | 252, 283 | v |
| Mayflower gold mine, SEINE RIVER, | | | gas in..... | 128 | i |
| R. R. D. | | | Haltou co..... | 57 | B xiii |
| Notes on, 1900..... | 84 | x | Campbellville..... | 16, 17 | v |
| Mayo Mg. and Development Co. | | | Milton, photos..... | 9, 67 | B xv |
| Capital and date of charter..... | 24 | A xiii | Lincoln co., Grimsby..... | 97 | i |
| tp., HASTINGS CO. | | | Peel co..... | 95 | B xiii |
| Iron ores in, analysis..... | 97 | A xv | Brampton, analysis..... | 89 | B xv |
| mining. <i>See</i> Min- | | | Port Credit, "..... | 90 | B xv |
| eral Range Iron | | | Welland co., Port Colborne..... | 129 | i |
| Mg. Co. | | | section..... | 97 | A xiv |
| tests on..... | 333, 334 | xii | Wentworth co..... | 95 | B xiii |
| Mazinaw lake, MISSISSIPPI RIVER, | | | Fruitland, analysis..... | 105 | B xv |
| ONT. | | | Hamilton, for sewer pipes... for sewer pipes..... | 116 | B xv |
| Granite-pegmatite dikes in..... | 91 | A xiii | York co., Mimico and Swansea. | 117 | B xv |
| Limestone in, analysis..... | 45 | B xiii | Gold Mining Co. | | |
| dolomite..... | 198 | ix | Coe iron mine optioned to..... | 80 | A xiv |
| Mica in, mining..... | 220 | v | worked by..... | 90 | A xv |
| ..... | 205 | xi | Meerschaum, (SILICATE OF MAG- | | |
| ..... | 91 | A xiii | NESIA). | | |
| muscovite..... | 84 | A xiv | North Burgess tp..... | 138 | R C |
| Portages numerous near..... | 218 | v | <i>Megambonia.</i> | | |
| Mazokama, W. OF ROSSPORT, L. | | | Kwataboahegan river..... | 158 | A xiii |
| SUPERIOR. | | | <i>Megaptera longimana.</i> | | |
| Zinc near..... | 86 | ix | Smiths Falls..... | 217, 224 | x |
| Mead, Daniel W. | | | <i>Megascops asio.</i> <i>See</i> Owl, screech | | |
| Paper by, on brick pavements, extracts..... | 114, 121 | iii | Megatherium gold mine, JACKFISH | | |
| ref..... | 112 | iii | BAY, L. OF THE WOODS. | 82, 135, 136 | vii |
| F. | 117 | ix | Gold Mg. Co. | | |
| William | 125 | i | Capital and date of charter..... | 11 | vii |
| Meaford, St. VINCENT TWP., GREY CO. | | | Mehkwanegon rapid, MATTAGAMI | | |
| Brick-yards in, notes..... | 65 | B xv | RIVER. See Poplar rapid. | | |
| Terraces near, notes by Coleman. | | | Meissner, C. A. | 196 | A xvi |
| ..... | 176, 177 | ix | Mekesewasun rapid, GROUND-HOG | | |
| Meaiten, Fred. | 39, 41 | A xiii | RIVER, ALG. | 132 | ix |
| Measles. | | | Mekiskan river. See Migiskan | | |
| Among Indians..... | 178 | A xiii | river. | | |
| Mechanicsville, OTTAWA. | | | Melaconite (COPPER OXIDE OR TEN- | | |
| Limestone quarry near. <i>See</i> | | | ORITE). | | |
| Wright's quarry. | | | Hints on, to prospectors..... | 456 | R C |
| Medicine Lodge gold mine, BLIND- | | | Melan concrete system. | | |
| FOLD LAKE, L. OF THE WOODS. | | | Description and sketch of..... | 178 | A xiv |
| Notes on, 1897..... | 111 | vii | <i>Malania acuta.</i> | | |
| Medina, ORLEANS CO., N. Y. | | | In Saugeen clay..... | 26 | B xv |
| Medina formation named after.. | 43 | R C | " <i>conica.</i> | | |
| copper mine. See Eldorado | | | In Saugeen clay..... | 26 | B xv |
| copper mine. | | | Melanite (GARNET). | | |
| formation. | | | Marniora tp..... | 203 | ix |
| Analysis of, from various localities. | 8 | B xv | Melanterite (GREEN VITRIOL). | | |
| Brick-clay in..... | 4, 101-104 | i | Hastings co. and L. Superior.... | 194 | ii |
| ..... | 120 | A xv | Occurrences..... | 203 | ix |
| Characteristics of..... | 7 | B xv | Melaphyre. | | |
| | | | Goldspitz, Bohemia..... | 171 | viii |

| | Page. | Vol. |
|---|----------|--------|
| Meldrum Bay , Dawson tp., MANI-TOULIN ISLAND. | | |
| Limestone near, analysis..... | 75, 76 | B xiii |
| notes..... | 79, 80 | B xiii |
| photo..... | 96 | B xiii |
| Mellilite . | | |
| Abitibi river..... | 185 | viii |
| <i>Meloe angusticollis</i> . See Beetle, butter-cup oil | | |
| Melons . | | |
| Moose Factory..... | 167 | iv |
| <i>Melospiza fasciata</i> . See Sparrow, song | | |
| Memphis , TEN. | | |
| Brick pavement in..... | 109 | iii |
| Menaccinite . See Titaniferous iron ore. | | |
| Menard , Louis..... | 51, 57 | xi |
| Mendeljeff , Dmitri L. | | |
| Views of, on origin of hydro-carbons..... | 164 | vi |
| gas..... | 141 | i |
| oil..... | 92 | A xiv |
| Mendoron (WYANDOTTE CHIEF)..... | 126 | xi |
| Meneghinite . | | |
| Barrie tp..... | 208 | vi |
| | 203 | ix |
| | 203 | xi |
| Hardness of..... | 202 | vi |
| Marble lake, Frontenac co..... | 194 | ii |
| Palmerston tp..... | 219 | v |
| Specific gravity of..... | 202 | vi |
| Menhinnick , J. R..... | 24 | vi |
| Mennie , Alex..... | 36 | viii |
| Menominee iron range , L. SUPERIOR, U. S. | | |
| Iron shipments from, 1884-8..... | 226 | R C |
| 1892-3..... | 146 | iii |
| <i>Mentha canadensis</i> . | | |
| Abitibi dist..... | 241 | A xiv |
| Mattagami valley..... | 150 | A xv |
| <i>Menyanthes trifoliata</i> . | | |
| Abitibi dist..... | 241 | A xiv |
| Mattagami valley..... | 150 | A xv |
| Menzie , R. E..... | 164 | R C |
| Meppen . | | |
| Experiments at, with nickel-steel guns..... | 140 | ii |
| Mer Bleue bog , CARLETON CO. | | |
| Area of..... | 197 | ii |
| Notes on..... | 190 | i |
| | 29, 30 | A xiii |
| Tests on moss from..... | 190 | vi |
| Merchant's quarry , COLLINGWOOD, SIMCOE CO. | | |
| Analysis of limestone from..... | 110 | B xiii |
| Mercury . | | |
| Clearing of, by alkali..... | 241 | vi |
| India, Austria, with arsenic..... | 101 | xi |
| Melting point of..... | 540 | R C |
| Separation of fine gold by..... | 451, 452 | R C |
| Test for..... | 449 | R C |
| Treatment of floured, from plates..... | 241 | vi |
| United States, statistics, 1888..... | 525 | R C |
| Wawa lake, near (?)..... | 195 | vii |
| Meredith , E. A..... | 127 | vi |
| claim , MAMAIN-E PEN., L. SUPERIOR. | | |
| Galena in..... | 198 | ix |

| | Page. | Vol. |
|---|----------|--------|
| Meredith tp. , ALG. | | |
| Rocks in..... | 188 | x |
| Striae in, direction..... | 211 | x |
| Merian , A. | | |
| Analysis by, of laurvikite from Norway..... | 211 | xi |
| <i>Meristella</i> . | | |
| Anderdon tp..... | 126 | xi |
| Merlin , RALEIGH TP., KENT CO. | | |
| Minor ref. to..... | 92 | A xvi |
| Oil and gas supply of..... | 97-101 | A xvi |
| Merriam , W. N..... | 270 | A xiv |
| Merrick , W. C..... | 117 | ix |
| | 142 | x |
| | 74 | xi |
| Merrickville , WOLFORD TP., GREN-VILLE CO. | | |
| Calceiferous formation at..... | 47 | B xiii |
| Iron works at..... | 329 | R C |
| Merrifield , L. L. | | |
| Gas generator of, paper on..... | 228-233 | xii |
| Merrill , Frederick J. H..... | 242 | A xiii |
| Merrimac river , U. S. | | |
| Waterpower of..... | 485 | R C |
| Merriman , Prof. Mansfield | | |
| Tests by, on nickel-steel..... | 187 | iv |
| Merritt , Thomas A..... | 12, 77 | vii |
| W. J..... | 73, 129 | vii |
| William Hamilton | | |
| Appointed on R. C..... | x, xxiv | R C |
| Mineral collections for local use suggested by..... | 260 | vii |
| Mining lectures given by, at Mar-mora..... | 180 | iii |
| ref. to..... | 248 | vi |
| Notes by, on:— | | |
| iron works, Kinnmount..... | 326, 331 | R C |
| Michigan mining school..... | 507 | R C |
| mines, locations and works visited by R. C..... | 71-204 | R C |
| Report by, on purchase of Govt. drills..... | 167-171 | iv |
| Report by, on Summer Mining classes, 1894..... | 215-218 | v |
| Summer Mining classes conducted by, 1896..... | 198 | vi |
| Work by, 1895..... | 6 | v |
| Merritt gypsum mine , GRAND RIVER. | | |
| Evidence of, before R. C..... | 121, 122 | R C |
| Gypsum in, thickness of..... | 45 | R C |
| Idle, 1893..... | 199 | iii |
| Notes on, 1891..... | 242 | i |
| 1892..... | 252 | ii |
| tp. , ALG. | | |
| Clav in. See Espanola. | | |
| Merrittton , GRANTHAM TP., LINCOLN CO. | | |
| Carbide factory at..... | 6 | vi |
| | 140 | xii |
| | 25 | A xvi |
| See also Willson Carbide Co. | | |
| Cyclone at, 1897..... | 17 | viii |
| Stone saw-mill at..... | 96 | i |
| | 119 | B xiii |
| Merry , A. | | |
| Notes by, on nickel in Levaek tp..... | 274 | v |

| | Page. | Vol. | | Page. | Vol. |
|---|----------|--------|--|---------------|--------|
| Mersea tp., ESSEX CO. | | | Metals. | | |
| Gas in..... | 22 | A xv | Ontario, names and occurrences..... | 190-193 | ii |
| boring for..... | 115, 116 | A xiv | and their ores. | | |
| depth of wells..... | 112 | A xv | Paper on, by Blue..... | 171-177 | i |
| Guelph formation..... | 28 | v | Metamorphic rocks. | | |
| <i>See also</i> Leamington. | 26 | A xiii | Formation of..... | 230 | vi |
| Oil in..... | 90 | A xiv | Names of various..... | 236 | vi |
| Mertensia paniculata. | | | Metamorphism. | | |
| Abitibi Lake dist..... | 241 | A xiv | Meaning of: notes on, by Blue... 63 | | i |
| Mattagami valley..... | 150 | A xv | Metcalf, J. M. | 169, 170 | C xiv |
| Merula migratoria. <i>See</i> Robin, American | | | Metcalf tp., MIDDLESEX CO. | | |
| Mesabi dist., MINN. | | | Bore-hole record in..... | 80 | B xiii |
| <i>See also</i> Mesabi iron range. | | | Metchkewedenong, MANITOULIN ISLAND, ALG. | | |
| Geological nomenclature of..... | 271 | A xiv | Nomenclature of..... | 79 | B xiii |
| Mining laws in..... | 13 | i | "Meteor" s.s. | 173 | xii |
| iron range, MINN. |  |  | ..... | 37 | A xv |
| Compared with Michipicoten range..... | 197, 199 | x | Meteor lake, HEADWATERS WANAPITUI RIVER, NIP. | | |
| Continuation of, in Ont..... | 65, 69 | ii | Altitude of..... | 104 | C xiv |
| notes by McInnes..... | 309, 310 | xii | Country N. of, character..... | 181 | x |
| Exhaustion of, possible..... | 8 | A xiii | S.W. of, worth prospecting..... | 17 | xi |
| Hematite of..... | 53 | ii | Esker near..... | 210 | x |
| Jasper of..... | 92 | v | Gold (alluvial) on, report by Coleman..... | 156-159 | x |
| Notes on, by Coleman..... | 153, 154 | ix | Gravel near..... | 182, 210 | x |
| Smith..... | 77 | ii | Iron ore near..... | 18, 210 | x |
| Ore from, analysis..... | 258 | A xiv | Terraces on..... | 106 | C xiv |
| quality..... | 21 | xii | altitude..... | 211 | x |
| Origin of iron in..... | 166 | A xv | ..... | 104 | C xiv |
| Production of, 1892-3..... | 146 | iii | Meteoric iron. <i>See</i> Siderite. | | |
| Royalties from..... | 226 | ii | Meteorites. | | |
| series. | | | Nickel in, suggests nickel steel... 173 | C xiv | |
| Extension of, east of Port Arthur. | 254 | A xiv | Notes on some, in Ontario..... | 203 | ix |
| ..... | 156 | A xv | Meteorological observations. | | |
| Meshed=Ali (OR NEEF), VILVET OF BAGDAD, ASIATIC TURKEY..... | 166 | i | Abitibi dist..... | 129, 130 | A xiii |
| =Hosseini. <i>See</i> Kerbela. |  |  | ..... | 237-239 | A xiv |
| Mesolite. |  |  | ..... | 147-149 | A xv |
| Mamaine pt..... | 203 | ix | Guelph..... | 149 | xi |
| Mesomakenda lake, S. W. of MATTAGAMI LAKE, ALG. | 130 | ix | ..... | 129, 130 | A xiii |
| Mesozoic. |  |  | ..... | 239 | A xiv |
| Definition of..... | 537 | R C | James bay..... | 106, 107 | iv |
| Messagamashen lake, HARDY TP., P.S.D. | | | Mattagami valley..... | 147-149 | A xv |
| Copper and nickel ores on..... | 262 | viii | Methuen Mining Co. | | |
| ..... | 171 | ix | Capital and date of charter..... | 11 | vii |
| Messagamashine copper mine. <i>See</i> Parry Sound Copper Mfg. Co. | | | tp., PETERBOROUGH CO. | | |
| Mesumakenda lake, ALG. | | | Barytes in..... | 213 | viii |
| Forest fires around..... | 141 | ix | ..... | 195 | ix |
| Metagama, ALG. | | | Celestite in..... | 222 | vi |
| Country west of, description.... 121 | A xiii | | Corundum in..... | 217 | vi |
| Iron ore near..... | 185 | ix | ..... | 208, 214, 218 | vii |
| Metalliferous veins. |  |  | ..... | 204 | viii |
| Origin of..... | 171, 172 | i | ..... | 204, 205 | xi |
| Metallurgical industries. | | | discovery..... | 245 | viii |
| Mechanical instruction in, need of..... | 415 | R C | exhibited at Pan-American Exhibition..... | 87 | xi |
| Metallurgy. | | | notes..... | 63 | vi |
| Methods of, at Copper Cliff, paper by McArthur..... | 299-303 | xii | by Miller..... | 227, 228 | vii |
| Of nickel, paper by Levat..... | 119-162 | ii | ..... | 206-214 | viii |
| | | | Geology of, notes by Miller..... | 194, 195 | xi |
| | | | Mica in..... | 203 | ix |
|  |  |  | ..... | 208 | xi |
| | | | mining..... | 245 | viii |
| | | | muscovite..... | 205 | ix |
|  |  |  | ..... | 91 | A xiii |
|  |  |  | ..... | 84 | A xiv |

| | Page. | Vol. | | Page. | Vol. |
|--|---------------|--------|---------------------------------------|---------------|-----------|
| Methuen tp.—<i>Con.</i> | | | Mica.—<i>Con.</i> | | |
| Old name of..... | 15 | ii | Mistaken for gold..... | 452 | RC |
| Potsdam formation in..... | 209, 210 | viii | | 9 | Bull. iii |
| Syenite in..... | 230 | vii | Notes by Goodwin, on various | | |
| nepheline, notes by Coleman..... | 252 | viii | forms of..... | 226 | iv |
| Methylic acid. | | | Occurrences..... | 203, 205, 207 | ix |
| As a by-product of charcoal | | | Prices and commercial sizes..... | 86 | A xvi |
| burning..... | 481 | RC | Production, 1880..... | 210 | RC |
| Metis, RIMOUSKI CO., QUE. | | | 1888..... | 72 | RC |
| Marine deposits at..... | 216 | x | 1891..... | 6 | i |
| Mexico. | | | 1892..... | 8, 11 | ii |
| Asphalt in, analysis..... | 166 | vi | 1893..... | 8, 10 | iii |
| Cobalt ores in..... | 71 | B xiv | 1895..... | 11 | v |
| Mispickel ores in..... | 102 | xi | 1897..... | 23 | vii |
| Nickel coinage in..... | 161 | ii | 1898..... | 11 | viii |
| Meyer, Charles L. | 117, 128, 129 | x | 1899..... | 13 | ix |
| Leopold. | 32 | viii | 1900..... | 11, 12, 25 | x |
| | 117, 128, 129 | x | 1901..... | 13, 27 | xi |
| Victor | | | 1902..... | 12, 13, 27 | xii |
| Experiments by, on nickel ore, | | | 1903..... | 3, 12-13 | A xiii |
| ref. to..... | 107 | viii | 1904..... | 1, 3, 20, 83 | A xiv |
| Meyers cave. See Myers Cave. | | | 1905..... | 1, 4, 21 | A xv |
| lake, S. SHERBROOKE TP., See | | | 1906..... | 1, 6 | A xvi |
| Christie lake. | | | Tete Jaune Cache, B.C., beryls | | |
| M H 208-210 gold locs. See Wen- | | | in..... | 237 | vii |
| digo mine. | | | United States:— | | |
| 230 gold loc. See Gold Pan- | | | New Hampshire, intruded by | | |
| ner mine. | | | batholithic gneiss..... | 159 | vii |
| 246 gold loc., EAGLE LAKE, | | | production, 1888..... | 525 | RC |
| R. R. d. | 93 | xii | Uses of..... | 14 | ix |
| 257 gold loc. See Eldorado | | | Villeneuve mine, Que..... | 68 | RC |
| mine, R.R. d. | | | quality..... | 150 | RC |
| Miami river, Ohio. | | | | | |
| Cincinnati group on..... | 116 | i | Abinger tp..... | 220 | v |
| Miaskite. | | | Mazinawe lake..... | 205 | xi |
| Ilmen mts., Russia..... | 213 | vii | Addington co..... | 149 | RC |
| Mica. | | | Bedford tp..... | 18 | viii |
| Association of, with apatite..... | 442 | RC | Butt tp..... | 172 | ix |
| corundum..... | 244 | vii | Calvin tp., Nip..... | 205 | ix |
| | 206, 211 | viii | Cariboo lake, P.S.N..... | 171 | ix |
| | 205 | xi | Dungannon tp..... | 205 | ix |
| photo..... | 216, 217 | viii | Hungerford tp..... | 149 | RC |
| Canada, production, 1870, 1880, | | | | 203 | ix |
| 1887..... | 209 | RC | L. of the Woods..... | 64 | RC |
| 1886..... | 243 | RC | | 205 | ix |
| 1888..... | 525 | RC | Loughborough tp..... | 170, 171 | RC |
| Canadian, competing with E. | | | | 98 | vii |
| Indian..... | 28 | xi | | 203 | ix |
| | 23 | xvi | Notes by Lacey and Merritt. | | |
| Description of..... | 538 | RC | | 148, 149 | RC |
| East India, production and value. | 28 | xi | Matawatchesan..... | 205 | ix |
| Evidence <i>re</i> before R. C..... | 148-151 | RC | Methuen tp..... | 205 | ix |
| Exhibit of, at World's Fair..... | 189 | ii | North Burgess tp. (phlogopite), | | |
| Industry of, 1906..... | 22, 23 | A xvi | analysis..... | 207 | ix |
| Mining of, report for:— | | | Perth dist..... | 53 | RC |
| 1881..... | 244, 245 | i | Perth mine, notes by Merritt. | 148 | RC |
| 1892..... | 249, 250 | ii | Pringle tp..... | 171 | ix |
| 1893..... | 192-196 | iii | Pondfoot tps..... | 171 | ix |
| 1895..... | 276-280 | v | Renfrew co:— | | |
| 1896..... | 278 | vi | associated with apatite..... | 438 | RC |
| 1897..... | 98 | vii | beryl..... | 235 | vii |
| 1900..... | 131-135 | x | Robert bay, Muskoka dist..... | 81 | B xiii |
| 1901..... | 286-292 | xi | Mica and Mining Co. | | |
| 1902..... | 125-132 | xii | Capital and date of charter..... | 11 | vii |
| 1903..... | 90-92 | A xiii | bay, L. SUPERIOR. | | |
| 1904..... | 83-86 | A xiv | Copper mining on, history of | | |
| 1905..... | 102-106 | A xv | early..... | 171-175 | ii |
| 1906..... | 86-91 | A xvi | | | |

| | Page. | Vol. | | Page. | Vol. |
|--|---------------|--------|---|---------------|--------|
| Mica Boiler and Pipe Covering Co. | | | Michie, E. L. | | |
| Exhibit of, at Pan-American Exhibition | 88, 89 | xi | Pyrites mining by | 20, 61 | A XV |
| Minor ref. to | 24 | vii | See also Michie pyrites mine. | | |
| Scrap mica worked by | 34 | vi | Northern Ontario pyrites mine. | | |
| Works of, notes on | 31 | v | H. S. | 125 | ix |
| removed to Montreal. | 25 | x | pyrites mine, BIG VERMILION LAKE, R. R. D. | | |
| Manufacturing Co. | | | Notes on, by Fraleck; photo of ore | 176, 177 | A xvi |
| Martha mica mine owned by | 132 | x | Michigan, MARQUETTE CO., MICIL | | |
| 290 | xi | | Wenstrom concentrator used at .. | 328 | xii |
| 128 | xii | | Michigan, U. S. | | |
| 104 A | xv | | Brick pavements in cities of | 108 | iii |
| Ottawa works of, closed | 131 | xii | Charcoal in, cost of | 341 | R C |
| Pike Lake mine owned by | 132 | x | Copper in, notes by Coleman | 144, 145 | ix |
| Work by, 1901 | 292 | xi | production, 1879 | 371 | R C |
| schist. | | | Geological Survey of, notes by Walker | 421 | R C |
| Definition of | 538 | R C | Gypsum deposits in | 119 | R C |
| 236 | vi | | Iron in, boring for, cost of | 175 | iv |
| French River dist. | 67, 68 | i | 231, 232 | v | |
| Wabigoon Lake dist. | 183 | vii | exhaustion possible | 8 | A xiii |
| trimming works. | | | mining, notes by Coleman | 150-152 | ix |
| Ganonoque, notes, 1901 | 292 | xi | production, 1884-87, 227, 468 | R C | |
| work suspended | 132 | xii | 1892-3 | 146 | iii |
| List of, 1906 | 90, 91 | A xvi | cost of | 10 | i |
| Notes on, 1900 | 135 | x | compared to Ont. | 103 | ii |
| 1901 | 291 | xi | royalty statistics, 1879, ... | 12 | i |
| 1902 | 131 | xii | smelting, records of furnaces, 1881 | 338, 339 | R C |
| 1903 | 92 | A xiii | See also Penokee-Gogebic range. | | |
| 1904 | 86 | A xiv | Limestone from, analysis | 13 | B xiii |
| 1905 | 135, 106 | A xv | Mining laws of, | 13 | i |
| syenite. | | | notes by R. C. | 281 | R C |
| Coe Hill (near) | 214 | viii | school of, | 426, 507, 508 | R C |
| Micanite. | | | See also Houghton. | | |
| Composition and uses of | 12 | A xiii | Moraine in, diamonds in | 123, 124 | ix |
| Manufacture of | 90 | A xvi | Oil in, flash test of | 164 | R C |
| Micaville (LATE STANLEYVILLE), N. BERGESS TP., LANARK CO. | | | Rocks in, Animikie | 33 | R C |
| Mica mining near. See Pike lake. | | | Huronian | 8 | R C |
| Michael, Ada L. | 71 | xi | Portage and Chemung. | 47 | R C |
| G. L. | 104 | vii | Salt production of | 228 | R C |
| 74 | xi | | and Ontario Oil Co. | | |
| Michelinia clappi. | | | Capital and date of charter | 26 | A xv |
| Cayuga, N. tp | 146 | xii | Lake Superior Power Co. | | |
| Hagersville | 145 | xii | Constructing canal at Sault Ste. Marie | 92 | xi |
| Villanova | 143 | xii | -Ohio Gold Mg. Co. | | |
| "canoeing. | | | Capital and date of charter | 11 | xi |
| Abitibi river | 187, 188 | viii | University. | | |
| Anderdon tp | 125 | xi | Notes on, by Richards | 511 | R C |
| Cayuga, N. tp | 146 | xii | Michillimackinac. See Mackinac. | | |
| Hagersville | 145 | xii | Michipicoten. See Michipicoten River. | | |
| Villanova | 143 | xii | Development Co. | 143 | x |
| Port Colborne (near) | 35 | xi | 74 | xi | |
| Michell, David. | 136 | i | 66 | xii | |
| H. C. | | | falls, MICHIPICOTEN RIVER. | | |
| Inventor of mica boiler-covering. | 31 | v | Biotite-peridotite from | 214 | A xiii |
| Michi lake, MICHIPICOTEN DIV. | | | Waterpower of | 72 | xi |
| Dimensions of | 287 | A xiv | 222 A | xiii | |
| Fish absent in | 297 | A xiv | harbour, L. SUPERIOR. | | |
| Minor ref. to | 292 | A xiv | Beaches on | 154 | viii |
| Schists and granite on | 349 | A xiv | 194 A | xv | |
| =Biju lake, N. OF L. SUPERIOR, TH. B. D. | | | Clay near, stratified | 184 | xi |
| Dimensions of | 287 | A xiv | altitude | 211 | x |
| Minor refs. to | 279, 285 | A xiv | | | |
| Rocks on and near | 348, 349, 351 | A xiv | | | |
| agglomerate | 342 | A xiv | | | |
| Route to, by canoe | 291, 292 | A xiv | | | |
| from Iron lake | 291 | A xiv | | | |
| Trees on | 296 | A xiv | | | |

| | Page. | Vol. | | Page. | Vol. |
|--|---------------------|-------|---|-----------------|-----------|
| Michipicoten harbour.—<i>Con.</i> | | | Michipicoten island.—<i>Con.</i> | | |
| Copper on..... | 209 | v | Geology of..... | 38, 39 | R C |
| chalcopyrite..... | 206 | vii | Gold on..... | 25 | R C |
| Country behind, description..... | 153 | xi | legend <i>re.</i> | 112 | v |
| Dock at, owned by Algoma Central R'y Co..... | 127 | x | Iron ore on..... | 36 | R C |
| photos..... 102, 103, 192, 193 | 127 | x | Nickel in..... | 176 | i |
| | 287 | A xiv | genthite..... | 58, 59 | B xiv |
| Iron ores on, notes by Coleman.. | 191 | x | 193, 194 | 193, 194 | ii |
| Photos of..... | 64, 65 | x | 150 | 150 | C xiv |
| | 171 | A xvi | miccolite..... | 194 | ii |
| Roches moutonnees on, photo. | 177, 193 | A xv | notes on alloys of. 443, 444 | 443, 444 | R C |
| | 201 | x | Notes on, by Coleman..... | 143, 144 | viii |
| Rocks on and near..... | 162-164 | xi | Pitchstone on..... | 194 | ii |
| cherts, ferruginous..... | 317 | A xiv | | 145 | ix |
| Doré conglomerate, photo. | 341 | A xiv | Rocks on, Keweenawan..... | 36, 67 | R C |
| greenstone..... | 177, 178 | xi | 9 Bull. iii | 9 | Bull. iii |
| schist conglomerate, photo. | 160, 161 | xi | 69 | 69 | iii |
| trap, ellipsoidal, photo. 160, 161 | 160, 161 | xi | 204 | 204 | vii |
| Route from, to Frances mine, | 289 | A xiv | notes by Coleman.. | 171 | viii |
| Shores south of, description. 130-132 | 130-132 | viii | trap..... | 15 | v |
| Iron ranges, MICHIPICOTEN | | | Silver-bearing minerals on..... | 103 | A xiii |
| div. | | | | | |
| Compared to those of Nipigon | | | Mining div. | | |
| Lake dist. 114 | 114 | A xvi | Area and boundaries..... | 3 | Bull. iii |
| S. of L. Superior. 195-199 | 195-199 | x | and establishment..... | 3 | vii |
| Geological notes, by Coleman. 182, 183 | 182, 183 | ix | Glacial striae in, direction.. | 178, 179 | ix |
| Keewatin formation in..... | 30 | B xiv | Gold and iron mining in.... | 102-104 | xii |
| Maps of..... | 291 | viii | <i>See also</i> Michipicoten Iron | | |
| | 159 | ix | range. | | |
| With vol. xi | | | assessment work only, 1906.... | 68 | A xvi |
| " xiv | | | notes by Boyd, 1904..... | 35 | A xiv |
| " xv | | | Willmott..... | 95 | xi |
| Mapped by L. Superior Power | | | report by Boyd..... | 70-75 | xi |
| Co..... | 94 | xi | 62-67 | 62-67 | xii |
| Reports on, by:— | | | 46-49 | 46-49 | A xiii |
| Bell, J. M. | 278-355 | A xiv | Miller.. | 78, 80, 102-104 | xii |
| Coleman..... | 154-164 | ix | Maps of..... | | |
| and Moore..... | 173-206 | A xv | 106, 188, 189 | 106, 188, 189 | vii |
| Willmott... 255-258 | 255-258 | viii | 126, 127, 291 | 126, 127, 291 | viii |
| 152-185 | 152-185 | xi | 159 | 159 | ix |
| Siderites of..... | 196, 197 | x | With vol. xi | | |
| island, L. SUPERIOR. | | | " xiv | | |
| Agate from..... | 192 | ix | " xv | | |
| exhibited at World's Fair. | 190 | ii | Notes, by Coleman..... | 221, 222 | A xiii |
| Analcite in..... | 193 | ix | Prehnite in, with copper..... | 207 | ix |
| Barytes on..... | 250 | iv | Reports on, 1897. Boyd..... | 100-106 | vii |
| Cedar on..... | 61 | R C | Willmott..... | 184 | Bull. iii |
| Chlorastrolite on..... | 196 | ix | 184-206 | 184-206 | vii |
| Cobalt minerals on..... | 51 | B xiv | 1898, Boyd..... | 100-112 | viii |
| Copper on..... | 36, 39 | R C | Coleman... 135-148 | 135-148 | viii |
| | 123 | iv | 1899, Boyd..... | 112-118 | ix |
| | 208 | v | 1900, Boyd..... | 137-144 | x |
| chalcocite..... | 196 | ix | 1904, J. M. Bell. 278-355 | 278-355 | A xiv |
| domeykite..... | 194 | ii | Revenue from, for licences:— | | |
| 198 | 198 | ix | 1896-7..... | 14 | vii |
| mining..... 60, 61, 97, 98, 103 | 60, 61, 97, 98, 103 | R C | 1898..... | 10 | viii |
| 1891..... | 234 | i | 1899..... | 11 | ix |
| 1894, idle..... | 239 | iv | 1900..... | 10 | x |
| 1898..... | 19 | viii | 1901..... | 12 | xi |
| notes and section..... | 103 | R C | Serious set back to..... | xi | A xiii |
| sulphurets met with.... | 67 | R C | Tin salting in, 1872, history. 138, 139 | 138, 139 | viii |
| mode of occurrence..... | 175 | i | Native Copper Co. | 60 | R C |
| native..... | 205 | vii | River, MICHIPICOTEN BAY, L. | | |
| Fishing village on, photo..... | 282 | A xiv | SUPERIOR. | | |
| | | | Beaches near..... | 154 | viii |
| | | | altitude..... | 155 | viii |
| | | | | 211 | x |
| | | | Copper and iron near, prospecting | | |
| | | | for, 1865..... | 254 | v |

| | Page. | Vol. | | Page. | Vol. |
|--|--------------------|--------|---|--------------|--------|
| Michipicoten river. — <i>Con.</i> | | | Mickle, G. R. | | |
| Description and geology of vicinity..... | 201, 202 | vii | Analysis by, of:— | | |
| ..... | 147, 148 | viii | blueite, Sudbury dist..... | 282 | xii |
| Gold mining near. <i>See</i> Manxman g. m. | | | anthraxolite, Balfour tp..... | 194 | ix |
| H. E. C. post at..... | 13 Bull. | iii | Kingston (near)..... | 163 | vi |
| abandoned..... | 101, 185 | vii | mispickel, Graham tp..... | 205 | ix |
| decline of..... | 241 | v | Description by, of pyrite crystal from Worthington m..... | 280 | xii |
| Magnetic variation at..... | 186 | vii | Extract from letter to, <i>re</i> origin of Sudbury ores..... | 278 | xii |
| Mining office at..... | 137 | x | Hardness of anthraxolite determined by..... | 160 | vi |
| Niecolite at..... | 205 | ix | McConnell nickel mine examined by..... | 161 c | xiv |
| Photos of..... | 204, 205 | vii | Notes by, on blueite..... | 160 c | xiv |
| Potatoes grown at..... | 13 Bull. | iii | Pyrrhotite crystal obtained by, Sudbury dist..... | 158 c | xiv |
| Progress of, 1899..... | 194 | v | Tin collected by, L. Wanapitei..... | 211 | ix |
| Rocks at and near..... | 204 | vii | Translation by, of early history of cobalt in Saxony..... | 74-90 | B xiv |
| Huronian..... | 18 | R c | ref. to..... | 7 | B xiv |
| ..... | 124 | iv | | | |
| Route from, to Grassett, description..... | 199-201 | vii | Microline. | | |
| Missinaibi, description..... | 193-197 | vii | Bedford tp..... | 37 | xii |
| Sandy plain near..... | 201 | A xv | Exhibited at World's Fair..... | 188 | ii |
| river, L. SUPERIOR. | | | Hardness and specific gravity..... | 202 | vi |
| Concentric walls on, notes by Agassiz..... | 201 | vii | Often really orthoclase..... | 203 | ix |
| Fall of..... | 188 | vii | Pikes Peak, Col..... | 225 | vi |
| Glaciation on..... | 7 Bull. | iii | Micropegmatite. | | |
| beaches, photo..... | 196 | A xv | Sudbury dist..... | 48, 107, 124 | c xiv |
| morainic ridges..... | 192 | A xv | Bowell tp..... | 115 | c xiv |
| Pleistocene deposits..... | 184 | xi | Levack tp..... | 84 | i |
| peaty, photo..... | 197 | A xv | McKim tp..... | 114 | c xiv |
| H. E. C. post on. <i>See</i> Michipicoten River. | | | Morgan tp..... | 110 | c xiv |
| Headwaters of..... | 187 | vii | Norman tp..... | 73 | c xiv |
| Indian settlement on..... | 101 | vii | Microperthite. | | |
| Minor ref. to..... | 202 | v | Mistaken for orthoclase..... | 205 | ix |
| Notes on, by Coleman..... | 176, 177 | A xv | Microphotos. | | |
| Willmott..... | 188-192 | vii | Anorthosite, Sherbrooke tp..... | 216, 217 | viii |
| Photos of..... | 140, 141, 156, 157 | vii | Feldspar-porphry, near mouth of Michipicoten river..... | 160, 161 | xi |
| Pine on..... | 200 | A xv | Gneiss, Redgut bay..... | 79 | iv |
| Portages on..... | 185 | vii | Granite, Pickerel lake..... | 89 | iv |
| length of..... | 5 Bull. | iii | Swell bay, Rainy lake..... | 93 | iv |
| Rapid on, photo of running a..... | 176 | A xv | Huronite, Huron bay, L. Superior..... | 187 | ix |
| Rocks on and near..... | 158, 167 | xi | Nickel-granite..... | 113 | viii |
| eruptives, notes by Coleman..... | 190, 191 | A xv | Norite, Parham..... | 216, 217 | viii |
| feldspar-porphry, photo..... | 160, 161 | xi | Quartz-porphry, Manitou Lake dist..... | 84 | iv |
| granite-porphry, petrography..... | 176 | xi | Middaugh, Walter. | 228, 229 | i |
| Huronian..... | 65 | R c | Middle falls, MATTAWAN RIVER. | 68 | ii |
| petrography..... | 175-177 | A xv | island, L. OF THE WOODS, R. R. D. | | |
| schist-conglomerate..... | 146 | viii | Carbonaceous shale near..... | 104 | vi |
| Waterpower on..... | 13 Bull. | iii | Gold mining on..... | 235 | ii |
| ..... | 206, 252 | vii | Minor ref. to..... | 181 | v |
| ..... | 222 | A xiii | island, L. HURON..... | 42 | B xiii |
| ..... | 67 | A xv | road, E. TILBURY TP., ESSEX CO. | | |
| ..... | 68 | A xvi | Gas and oil on..... | 97-99 | A xvi |
| photo..... | 168 | A xvi | Middleburg dist., TRANSVAAL. | | |
| schists. | | | Cobalt in..... | 70 | B xiv |
| Notes on, by J. M. Bell..... | 299-307 | A xiv | Middlemiss, C. S. | 233 | viii |
| Moore..... | 202, 203 | A xv | Middlesborough, YORKSHIRE, ENG. | | |
| Copper Co. | | | Steel making at..... | 362 | R c |
| Capital and date of charter..... | 10 | vii | Middlesex co. | | |
| Mickie, Vick | 96 | vii | Brick-yards of, notes on..... | 79-81 | B xv |
| | | | Hamilton formation in..... | 25 | B xiii |
| | | | Limestone in, notes by Miller..... | 80 | B xiii |
| | | | Peat bogs in..... | 28 | A xiii |

| | Page. | Vol. | | Page. | Vol. |
|--|--------------|------|--|--------------------|------|
| Middlesex co.,—<i>Con.</i> | | | Mikado gold mine,—<i>Con.</i> | | |
| Salt works in, number of 1897... | 24 | vii | Minor ref. to..... | 14 | xii |
| 1898... | 17 | viii | Notes on, by Coleman..... | 105, 256 | vi |
| Middleton, —? | | | Engledue..... | 256 | vi |
| Quarry of, Ancaster..... | 141 | xii | 1896..... | 7 Bull. | i |
| | 125 B | xiii | 47, 48, 105-107 | | vi |
| Middleton, ESSEX CO. | | | 1897..... | 28, 29, 51-53, 120 | vii |
| Corniferous formation at..... | 118 B | xiii | | 276 | viii |
| Middleton, NEAR JACKFISH BAY, L. | | | 1898..... | 44, 66, 67 | viii |
| SUPERIOR. | | | 1899..... | 52-56 | ix |
| Gold mining near, notes, 1898... | 82 | vii | 1900..... | 76, 77, 92, 93 | x |
| 1900... | 87 | x | 1901..... | 81, 252, 253 | xi |
| bridge, GRAND RIVER. | | | 1902..... | 95 | xii |
| Quelph formation near..... | 33, 115 B | xiii | Photo of..... | 16, 17 | vii |
| tp., NORFOLK CO. | | | | 48, 49 | ix |
| Limonite in..... | 201 | ix | | 80, 81 | x |
| | 88 B | xiii | Plan of..... | 64, 65 | viii |
| Midland, TAY TP., SIMCOE CO. | | | Section of..... | 53 | ix |
| Artesian wells in..... | 58 | i | Shut down, 1903..... | 58, 60 A | xiii |
| Brick-yard at, notes on..... | 100 B | xv | Sulphides of..... | 113 | vi |
| Canada Iron Furnace Co's property at, plan of..... | 16 | ix | Veins of, character..... | 118 | vi |
| Photo of iron ore being discharged at..... | 16, 17 | x | Work by, 1896..... | 258 | vi |
| Smelter at..... | 10 A | xiii | Gold Mg. Co. | | |
| | 16 A | xv | Capital and date of charter..... | 11 | vii |
| | 17 A | xvi | | 38 A | xiii |
| blown in..... | 25 | xii | Formation of..... | 256 | vi |
| description..... | 102 | ix | Peninsula Gold Mg. and Development Co. | | |
| | 27-30 | x | Capital and date of charter..... | 10 | ix |
| extension..... | 22 | xii | Reef gold mine, SHOAL LAKE, L. OF THE WOODS, R. R. D. | | |
| notes, 1900..... | 16, 17 | ix | Notes on, 1901..... | 253 | xi |
| operating, 1901..... | 25 | xi | 1902..... | 94 | xii |
| photos..... | 16 | ix | 1903..... | 63 A | xiii |
| | 16, 160, 161 | x | Milburn, Thomas..... | 60 | ix |
| suggested..... | 6 | viii | Miles, C. F. | | |
| Miers, Prof. Henry A..... | 144 | vii | Iron discovered by, L. of the Woods..... | 64 | ix |
| Mieville, John F. | | | D. P..... | 104 | vii |
| Combined gold mine reported on by..... | 73 | x | bay, L. OF THE WOODS..... | 118 | vii |
| Manager, Bath Island g. m..... | 60 | viii | Milford, NEAR CINCINNATI, U. S. | | |
| Decag. m..... | 94 | x | Diamonds from..... | 121 | ix |
| Regina g. m..... | 56 | viii | Mill. See Stamp mill. | | |
| | 44 | ix | lake, McDOUGALL TP., P. S. D. | | |
| | 90 | x | Limestone on..... | 94, 95 B | xiii |
| Migiskan river, MATTAGAMI LAKE, QUE. | | | | 169 | ix |
| Timber in valley of..... | 204 | v | tests. See Stamp mill tests. | | |
| Mijnemungshing lake, MICHIPICOTEN DIV. | | | Millar, Rev. Ferguson..... | 45 A | xv |
| Iron formation near..... | 179 A | xv | J. W..... | 65 | viii |
| Morainic deposits near..... | 192 A | xv | James..... | 205 | i |
| Rocks on..... | 191 A | xv | Millbridge, TUDOR TP., HASTINGS CO. | | |
| monzonite..... | 179, 191 A | xv | Lead and zinc mining near. <i>See</i> Katherine lead mine. | | |
| "Mikado" s. s..... | 53 | vii | Pyrrhotite in..... | 200 A | xvi |
| gold mine, SHOAL LAKE, L. OF THE WOODS. | | | Rocks in vicinity of..... | 198, 199 | xi |
| Accidents at..... | 24 | viii | Mille Isles seig., TERREBONNE CO., QUE. | | |
| | 31, 32 | ix | Peat in..... | 198 | ii |
| | 44 | x | Roches, CORNWALL TP., STORMONT CO. | | |
| Battery statistics at..... | 22 | viii | Chazy limestone opposite..... | 47 B | xiii |
| Bismuthinite in..... | 195 | ix | character of..... | 110 B | xiii |
| Depth of, 1900..... | 35 | ix | quarries..... | 18 B | xiii |
| Exhibit of, at Pan-American Exhibition..... | 85 | xi | Miller, Charles..... | 97 | vii |
| Granite and diabase in..... | 116 | vi | | 25 | ix |
| | 14 | xii | F. H..... | 48 A | xiii |
| Mining class at, 1898..... | 280 | viii | F. S..... | 231, 236 | iv |
| 1901..... | 65, 66 | xi | | 264 | v |
| 1902..... | 59 | xii | | | |

| | Page. | Vol. |
|---|----------|--------|
| Miller, Frederick | | |
| Evidence by, before Roy. Com. | | |
| <i>re</i> :— | | |
| general topics..... | 65 | R C |
| German mining laws..... | 318 | R C |
| iron smelting, cost of..... | 396 | R C |
| Pine Portage specimen..... | 119 | R C |
| G. L. | 48 | A xiii |
| George | | |
| Miller island, L. of the Woods, | | |
| named after..... | 171 | v |
| Gerrit S. | 111, 112 | vi |
| I. M. | 48 | A xiii |
| J. B. | | |
| Analysis made for, of limestone.. | 92 | B xiii |
| Govt. drill hired to..... | 44, 45 | A xiii |
| Iron developing by, near Sault | | |
| Ste. Marie..... | 187-190 | x |
| Licence to..... | 104 | vii |
| J. V. | | |
| Prospecting by, Sudbury dist.... | 49 | xii |
| | 214 | A xiii |
| | 15, 111 | C xiv |
| James | | |
| Evidence by, before R. C. <i>re</i> :— | | |
| copper, Drury tp..... | 106 | R C |
| mining laws..... | 308 | R C |
| silver, Sault Ste. Marie..... | 203 | R C |
| James (H.B.C.) | | |
| Acknowledgments to..... | 142 | ix |
| | 182 | x |
| | 12 | A xiii |
| | 116, 184 | A xiv |
| | 29 | A xv |
| Statement by, <i>re</i> fur-trade at Fort | | |
| Mattagami..... | 131, 151 | A xv |
| Vegetables grown by, at Fort | | |
| Mattagami..... | 240 | A xiv |
| John | 187 | vii |
| L. B. | 104 | viii |
| O. T. | 66 | xii |
| R. E. | 206 | iv |
| R. J. | 117 | ix |
| | 143 | x |
| | 66 | xii |
| | 48 | A xiii |
| Prof. Willet G. | | |
| Accident at Radnor mine investi- | | |
| gated by..... | 47 | xii |
| Acknowledgments to..... | 189 | xii |
| Appointment of, as Provincial | | |
| Geologist..... | 6 | xi |
| Cobalt, Ont., named by..... | 40 | A xiv |
| | 10 | B xiv |
| Larder Lake mineral possibilities | | |
| pointed out by..... | 203 | A xvi |
| Mining classes conducted by, | | |
| 1896..... | 197 | vi |
| Notes by, on :— | | |
| Cobalt conglomerate..... | 212 | A xvi |
| Glendower iron mine..... | 227 | v |
| Golden Fleece gold mine..... | 76 | A xvi |
| iron ore N.E. of Wanapitei | | |
| lake..... | 201 | x |
| Moose Mt. iron deposits..... | 73 | A xvi |
| oil, Raleigh tp..... | 40-42 | xii |
| extract..... | 111 | A xiv |
| pyrites near Plevna..... | 164 | A xvi |
| Radnor iron mine..... | 259 | xi |

| | Page. | Vol. |
|--|----------|--------|
| Miller, Prof. Willet G.—<i>Con.</i> | | |
| Notes by, on.— <i>Con.</i> | | |
| Sauguen clay..... | 19 | B xv |
| Tip-top copper mine..... | 173 | A xvi |
| Papers by, on :— | | |
| Grenville-Hastings unconform- | | |
| ity (and Knight)..... | 221, 222 | A xvi |
| Minerals..... | 200-205 | vi |
| of Ontario..... | 191-212 | ix |
| Pre-Cambrian nomenclature..... | 269-277 | A xiv |
| Rocks and Rock structures..... | 229-236 | vi |
| Preface by, to Baker's report | | |
| on clay..... | 1, 2 | B xv |
| Refs. to surveys by, in :— | | |
| Cobalt dist..... | 2 | A xiii |
| | 5 | A xiv |
| | 7 | A xvi |
| Corundum dists..... | 64-66 | vi |
| Frontenac co..... | 298 | xii |
| Hastings dist..... | 213 | xi |
| Timagami dist..... | 8 | A xvi |
| Reports by, in :— | | |
| 1895. First class field-geology, | | |
| School of Mines, Kings- | | |
| ton..... | 218-220 | v |
| 1896. Preliminary report on | | |
| corundum of East Ont- | | |
| ario..... | 64-66 | vi |
| 1897. Geological branch of | | |
| School of Mines, Kings- | | |
| ton..... | 261, 262 | vii |
| Economic geology of | | |
| Eastern Ont., specially | | |
| corundum..... | 207-238 | vii |
| 1898. Economic geology of | | |
| Eastern Ont., specially | | |
| corundum..... | 205-240 | viii |
| refs. to..... | 245 | viii |
| | 19 | ix |
| 1899. Minerals of Ontario, | | |
| with notes..... | 192-212 | ix |
| 1900. Iron ores of Nipissing | | |
| dist..... | 160-180 | x |
| ref. to..... | 181 | A xvi |
| 1901. Mines of N.W. Ontario, | | |
| 73-107..... | | xi |
| Eastern Ontario gold | | |
| belt..... | 186-207 | xi |
| Country N. of L. Timis- | | |
| kaming..... | 214-220 | xi |
| 1902. Iron ranges N. of Ont- | | |
| ario..... | 304-317 | xii |
| 1903. Mines of E. Ontario... 88-95 | | A xiii |
| Silver deposits of Cobalt | | |
| dist..... | 96-103 | A xiii |
| Limestones of Ontario.. | Pt. B | xiii |
| 1904. Silver deposits of Cobalt | | |
| dist..... | Pt. B | xiv |
| Iron range of Boston tp. | | |
| | 261-267 | A xiv |
| 1906. Lake Abitibi gold de- | | |
| posits..... | 219, 220 | A xvi |
| 1907. 2nd Edition, Silver de- | | |
| posits of Cobalt..... | Pt. B | xvi |
| 3rd Edition, Silver de- | | |
| posits of Cobalt dist.. | Pt. B | xvi |

| | Page. | Vol. | | Page | Vol. |
|--|------------|------|--|-------------|------|
| Miller, Prof. Willet G.—<i>Con.</i> | | | Mills tp., P. S. D. | | |
| Services of, obtainable as mining expert | 6 | xii | Copper and limestone in. | 170 | ix |
| Work by, 1900 | xii A | xiii | Millstone grit. | | |
| 1901 | 6 | x | Definition of | 538 | R C |
| 1902 | 7 | xi | Millvale steel mill, PITTSBURG | | |
| 1903 | 4 | xii | Labour employed at, statistics .. | 370 | R C |
| 1904 | x, xi A | xiii | Millward, George | 242 | i |
| 1905 | xvi A | xiv | Milne, Alexander | 77 | x |
| 1906 | 156 A | xv | | 59 | xii |
| W. J. | 2, 9, 14 A | xvi | J. J. | | |
| Walter | 40 | iii | Notes by, on horse-power at | | |
| Metcalf, Parkins & Co. | 65, 156 | v | Beaverton peat works | 224 | xii |
| Wages paid by, statistics | 370 | R C | Peat machine of, notes | 32, 33 A | xiii |
| corundum mine, METHUEN | | | photo | 48, 49 A | xiii |
| TP., PETERBOROUGH CO. | | | John (Essex) | 56 | i |
| Notes on, by Miller | 228 | vii | John | | |
| Rocks of | 208, 209 | viii | Interested in Hamilton Iron & | | |
| gneiss, analysis | 227 | vii | Steel Co. | 29 | iv |
| iron mine, MADOC TP., HASTINGS CO. | | | | 46 | v |
| Notes on, 1898 | 32 | viii | | 97 | vii |
| island, L. OF THE WOODS. | | | Milton, J. Muter | 112 A | xiv |
| Historical notes on | 170, 171 | v | Milton, ESQUESING TP., HALTON CO. | | |
| lake, NEAR MANITOUWICK | | | Brick clay at and near | 73, 229 | R C |
| LAKE, ALG. | | | evidence before R. C. | 85 | R C |
| Nomenclature of | 197 | vii | notes by Bell | 78 | R C |
| tp., FRONTENAC CO. | | | quarries, photo | 7, 9 B | xv |
| Granite in | 203 | xi | works | 102, 103 | i |
| Marble in | 80 | R C | photo | 69 B | xv |
| Mica in | 150 | R C | terra-cotta | 101 | i |
| | 244 | i | notes | 120 B | xv |
| mining | 203 | ix | Lime made at, analysis | 15 A | xiii |
| muscovite | 289 | xi | Medina shale at | 29 | xii |
| molybdenite in | 205 | ix | analysis | 8 B | xv |
| Millerite (NICKEL-SULPHIDE). | | | for bricks | 128 | iii |
| Cobalt dist. | xi A | xiii | Springs in | 55 | i |
| | 12, 13 B | xiv | Pressed Brick Co. | | |
| Brompton lake, Que. | 59 B | xiv | Exhibit of, at Pan-American Ex- | | |
| Composition of | 168, 170 | ii | hibition .. | 84, 90 | xi |
| Hardness of | 202 | vi | Govt. drill lent to | 59, 60 | xi |
| Joachimsthal, Bohemia | 61 B | xiv | Notes on | 102, 103 | i |
| New Caledonia | 150 C | xiv | Plant and quarry of, photos .. | 7, 68, 69 B | xv |
| Notes by Goodwin | 213 | vi | Producing, 1902 | 29 | xii |
| Specific gravity of | 202 | vi | Terra-cotta made by | 120 B | xv |
| Sudbury dist. | 192 | ii | Milwaukee, WISCONSIN, U.S. | | |
| | 203 | ix | Building-brick of | 121 | iii |
| | 159 C | xiv | Limestone from, analysis | 15, 16 B | xiii |
| Copper Cliff mine | 281 | xii | Mimetite. | | |
| | 59 B | xiv | Saxony | 89 B | xiv |
| Milligan, George E. | 43 | iii | Mimico, ETOBICOKE TP., YORK CO. | | |
| Millikin, W. H. | 104 | viii | Brick works at, notes and photo. | | |
| Milling of gold ores. | | | | 110, 111 B | xv |
| Notes on, by Hardman | 237-243 | vi | Clay from, analysis | 8 B | xv |
| Mills, George | | | Gas near, notes on, 1890 .. | 138, 139 | i |
| Brick-making by, Hamilton | 106 B | xv | Hudson River formation at, an- | | |
| Mills, J. G. | | | alysis | 128 | iii |
| Zinc mining by, near Chelmsford. | 33 | viii | <i>See also next ref.</i> | | |
| James W. | 124 | vii | Sewer-pipe works at | 29 | xii |
| Samuel Dillon | | | notes | 117 B | xv |
| Notes by, on:— | | | photo | 118 B | xv |
| iron ores, St. Ignace, Mich. | 98-105 | ii | river, YORK CO. | | |
| molybdenite, Haliburton dist. | | | Hudson River formation on .. | 126 B | xiii |
| | 45, 46 | xi | Sewer Pipe and Brick Mfg. | | |
| and Cunningham. | | | Co. | | |
| Feldspar mining by, Oso tp. | 83 A | xiv | Bricks of, tests on | 130 | iii |
| Mica mining by, S. Sherbrooke | | | Shales of, analysis | 128 | iii |
| tp. | 86 A | xiv | Minulus ringens. | | |
| 18 M.I. | | | Abitibi Lake dist. | 241 A | xiv |
| | | | Mattagami valley | 150 A | xiv |

| | Page. | Vol. | | Page. | Vol. |
|---|-------------|------|--|--------------------|------|
| Mina lake, NEAR L. OF THE WOODS, R. R. D. | | | Mineral exports. | | |
| Description of..... | 116 | vii | Canada, 1874-86..... | 238 | R C |
| Mindemoya lake, MANITOULIN ISLAND, ALG. | | | Ontario, 1874 and 1886..... | 238 | R C |
| Clinton and Niagara formations on..... | 78 B | xiii | King Mg. and Development Co. | | |
| Minden tp., HALIBURTON CO. | | | Capital and date of charter..... | 11 | vii |
| Grenville series on..... | 56 B | xiii | lands. See Mining lands. | | |
| Magnetite in, analysis..... | 201, 202 | ix | oil. See Oil. | | |
| Minderman, F. W. E. | 340 | xii | pigments. | | |
| Mine Centre, SHOAL LAKE, SEINE RIVER. | | | <i>See also Oehre.</i> | | |
| Country between, and Savant, notes by Blue..... | 125-154 | v | Canada, production, 1886-87..... | 243 | R C |
| Country between, and Fort Frances, notes by Blue.... | 160, 161 | v | 1888..... | 525 | R C |
| Dikes near, notes on..... | 279 | viii | Distribution of, notes by Blue... | 177 | i |
| Geology of vicinity..... | 134 | xi | Charleston lake, iron ore..... | 140 | R C |
| Gold mining at and near:— | | | Hints on, to prospectors..... | 462 | R C |
| 1896..... | 80, 260-263 | vi | L. of the Woods..... | 64 | R C |
| 1897..... | 73-75 | vii | pitch. See Asphaltum. | | |
| 1898, 45, 76-84, 263-274, 277, 278 | | viii | point, L. SUPERIOR. | | |
| 1899..... | 64-75 | ix | Minor ref. to..... | 69 | iii |
| 1900..... | 80-84 | x | Strontium at..... | 75 | iii |
| notes by Blue..... | 150-160 | v | Trap north of..... | 72 | iii |
| Mining class at..... | 6, 216 | y | production. | | |
| 1998..... | | vi | Canada, 1870, 1880..... | 209 | R C |
| Notes on and vicinity..... | 155 | v | 1874-1886..... | 214 | R C |
| Road from, northwards..... | 34 | vii | 1887..... | 209, 243 | R C |
| 49..... | | viii | <i>compared with U.S.</i> | 212, 213 | R C |
| Sand hills near..... | 146 | xi | Ontario, 1870, 1880, 1887..... | 210 | R C |
| La Motte, Miss. | | | 1874-1886..... | 214 | R C |
| Cobalt in lead ores at..... | 71 B | xiv | 1888..... | 72 | R C |
| Nickel in..... | 131 | ii | 1891..... | 5, 6 | i |
| lead ores of..... | 146 C | xiv | 1892..... | 5-12 | ii |
| refinery..... | 103 A | xiii | 1893..... | 6-10 | iii |
| Mineral(s). | | | <i>compared with 1903...</i> | 3 A | xiii |
| Apatite districts, list of..... | 442 | R C | 1894..... | 11 | iv |
| Arelacian rocks, list of..... | 169 | i | 1895..... | 11 | v |
| Definition of..... | 200 | vi | 1896..... | 13 | vi |
| 538..... | | R C | 1897-8..... | 15 A | vii |
| Description, by Goodwin, of some of the principal..... | 206 | vi | v, vi B | vi | |
| Determination of..... | 203-205 | vi | iii C | vii | |
| extracts from Copp's Manual. | | | 1899..... | 13 | ix |
| 447-464..... | | R C | 1900..... | 7, 11, 12 | x |
| Development of, measures for aiding..... | 407-429 | R C | 1900-1..... | 8, 9, 12, 13 | xi |
| For Summer Mining Schools, regulations <i>re c.</i> elections... | 199-200 | vi | 1902..... | 12, 13 | xii |
| Formulae for various..... | 200-203 | vi | 1903..... | 2, 4 A | xiii |
| Hardness of scale..... | 448, 535 | R C | 1904..... | 1-3 A | xiv |
| 200-203..... | | vi | 1905..... | 1-4 A | xv |
| Laurentian system..... | 249 | v | 1906..... | 3-6 A | xvi |
| list of..... | 11 | R C | Products Co. | | |
| Ontario, paper by..... | 165-175 | i | Bounty payments to, 1900..... | 32 | x |
| Miller..... | 192-212 | ix | Range Iron Mining Co. | | |
| Railways dependent on, for freight..... | 410 | R C | Capital and date of charter..... | 9 | xii |
| Royalties on, <i>See Royalties.</i> | | | Minor ref. to..... | 20 | xii |
| Specific gravity of..... | 200-203 | vi | Photos..... | 96, 97, 224, 225 A | xiii |
| Utility of collecting..... | 522 | R C | 96 A | xv | |
| Mineral collections. | | | 81, 83 A | xvi | |
| Availability of supplying, to local institutes..... | 412, 413 | R C | Tests, with Wetherill separator, on ores worked by..... | 333, 334 | xii |
| Exploration and Develop- ment Co. | | | Work by, 1901..... | 260, 261 | xi |
| Capital and date of charter..... | 11 | vii | 1902..... | 114 | xii |
| | | | 1903..... | 94 A | xiii |
| | | | 1904..... | 77, 78 A | xiv |
| | | | 1905, notes..... | 95-97 A | xv |
| | | | 1906..... | 16 A | xvi |
| | | | <i>n tes.</i> | 56, 82 A | xvi |
| | | | tar. See Maltha. | | |

| | Page. | Vol. |
|---|---------------|--------|
| Mineral veins. | | |
| How formed..... | 251-253 | v |
| In Laurentian system, notes by Bell..... | 249 | v |
| In schistose rocks, origin and formation of bedded..... | 51 | iv |
| water. See Water, mineral | | |
| Mineralogy. | | |
| Method of teaching, by Sommer | | |
| Classes..... | 281, 282 | viii |
| Miners. | | |
| Health and safety of..... | 306 | R C |
| Schools for, need of..... | 416, 417 | R C |
| See also Mining schools. | | |
| bay, GULL LAKE. | | |
| Silver mining on (local tradition). right. | 57 | B xiii |
| Provisions of, New South Wales. | 290 | R C |
| Minerva gold mine, L. OF THE | | |
| Woods, R. R. D..... | 64 | R C |
| Minerve Land, U. S. | | |
| Coal on..... | 175 | A xiii |
| Mines. | | |
| Development of, measures for aiding..... | 407-429 | R C |
| Lighting of..... | 199 | iv |
| Picking the eyes of..... | 158 | vi |
| Sections of various. See Sections of mines. | | |
| Contract and Investigation Co. | | |
| Capital and date of charter..... | 10 | ix |
| Mispickel reported by, near Schreiber..... | 106 | xi |
| Work by, 1903..... | 61, 62 | A xiii |
| Investment Association. | | |
| Capital and date of charter..... | 11 | vii |
| Selection Co. | | |
| Capital and date of charter..... | 11 | vii |
| Mineville, ESSEX CO., U. S. | | |
| Wenstrom concentrator employed at..... | 328 | xii |
| Mining. | | |
| For annual reports on. See In- spectors of Mines. | | |
| accidents. See Accidents. | | |
| Acts. See Acts of Parliament. | | |
| and Lands Development Co. | | |
| Capital and date of charter..... | 30 | A xvi |
| booms. | | |
| Cobalt, Ont..... | 10, 48 | A XV |
| | 14 | A xvi |
| Harm done by..... | 8 | B xiv |
| Influence of, notes by Borron..... | 258 | v |
| Injured by statistics..... | 423 | R C |
| claims. | | |
| Area of..... | 257, 258, 274 | R C |
| and condition of holding..... | 3 | vii |
| Survey of..... | 276 | R C |
| cost..... | 304, 305 | R C |
| classes. See Summer Mining classes. | | |
| Companies. | | |
| List of, incorporated 1867-1897..... | 7 | vii |
| | 1898..... | 9 |
| | 1899..... | 9 |
| | 1900..... | 9 |
| | 1901..... | 11 |
| | 1902..... | 8 |

| | | |
|---|----------------|--------|
| Mining Companies. — Con. | | |
| List of, incorporated 1903..... | 37 | A xiii |
| | 1904..... | 24 |
| | 1905..... | 23, 24 |
| | 1906..... | 27-31 |
| Development and Securities Co. | | |
| Capital and date of charter..... | 28 | A xvi |
| divisions. | | |
| List of, and description..... | 36-47 | A xvi |
| engineers. | | |
| As liars..... | 168 | i |
| Qualifications for..... | 425 | R C |
| industry. | | |
| Influence of commercial condi- tions upon, report by R. C. | 205-254 | R C |
| Origin of, in Ontario..... | 255 | R C |
| Roads to help, built by Govt..... | 9 | vi |
| Technical instructions for, need of..... | 415 | R C |
| See also Mining schools. | | |
| Statistics of, use of..... | 425 | R C |
| lands. | | |
| Development of, measures for aiding..... | 407-429 | R C |
| needful, not speculation in..... | xvi | R C |
| Germany, ownership of..... | 19 | i |
| How acquired and held..... | 226, 227 | ix |
| Ownership of, in various countries. 15-48..... | i | |
| Price of..... | 7 | i |
| Regulations of, 1846..... | 125 | vi |
| Sales and leases of, statistics, 1891, 7, 8..... | i | |
| | 1891-1902..... | 10 |
| | 1892..... | 7 |
| | 1893..... | 5 |
| | 1894..... | 10 |
| | 1895..... | 9 |
| | 1896..... | 10 |
| | 1897..... | 14, 15 |
| | 1898..... | 10 |
| | 1899..... | 11 |
| | 1900..... | 10 |
| | 1901..... | 12 |
| | 1902..... | 10 |
| | 1903..... | 36 |
| | 1904..... | 24 |
| | 1905..... | 24 |
| | 1906..... | 26 |
| Lands Agencies. | | |
| Kenora, establishment of..... | 2, 3 | vii |
| Reports on, 1900..... | 145-148 | x |
| | 1901..... | 80-82 |
| | 1902..... | 49 |
| | 1904..... | 34, 35 |
| laws. | | |
| Australasia..... | 286-296 | R C |
| Canada..... | 263-277 | R C |
| Ontario. | | |
| changes in, suggested..... | 301-307 | R C |
| Cobalt camp, effect of..... | 6 | A XV |
| compared to B.C..... | 4, 5 | vii |
| paper by Blue..... | 221-229 | ii |
| | 225-229 | ix |
| Europe..... | 296-301 | R C |
| Germany..... | 318 | R C |
| Great Britain..... | 285, 256 | R C |
| Report on, by R. C..... | 254-318 | R C |

| | Page. | Vol. |
|---|--------------------|------|
| Mining laws. — <i>Con.</i> | | |
| United States | 278-285 | R C |
| Minnesota | 7, 12 | i |
| revenue. See Mining lands, | | |
| sales and leases. | | |
| roads. See Roads. | | |
| royalties. See Royalties. | | |
| schools. | | |
| <i>See also</i> Royal School of Mines. | | |
| School of Practical Science. | | |
| Advisability of, evidence before— | | |
| R. C. | 416-429 | R C |
| Europe, report by R. C. | 494-502 | R C |
| Austria-Hungary | 513 | R C |
| England | 417 | R C |
| France | 494, 497-502 | R C |
| Germany | 417, 495, 501, 513 | R C |
| Location of, notes on | 419 | R C |
| New South Wales | 289 | R C |
| New Zealand | 513-521 | R C |
| 221, 222 | iv | |
| Ontario, description | 193-198 | vi |
| Port Arthur, suggested | 427 | R C |
| recommended by R. C. | xxiii | R C |
| report, 1895 | 212-215 | v |
| Paper on | 212-217 | i |
| Report on, by R. C. | 492-521 | R C |
| United States, full notes | 502-512 | R C |
| Houghton, Mich | 426, 512 | R C |
| Rapid City, Dak. | 424, 512 | R C |
| Victoria, Australia | 521 | R C |
| statistics. See Statistics. | | |
| Minisegog lake, PARRY SD. DIST. | | |
| Limestone on | 94 B | xiii |
| Minissinaqua lake, MISSISSAGI RIVER. | | |
| <i>See</i> Peninsula lake. | | |
| Ministic lake, SUDBURY DIST. | | |
| Diabase dikes on | 76 | i |
| Mink. | | |
| Abitibi dist. | 193 | viii |
| 242 A | xiv | |
| Hinterland, The | 133 | iv |
| Mattagami valley | 131 A | xv |
| Michipicoten div., rare | 297 A | xiv |
| Moose River basin | 178 A | xiii |
| Nipigon Lake dist. | 139 A | xvi |
| Timagami Lake dist. | 58 | R C |
| lake, RENFREW CO. | | |
| Marl in | 107 B | xiii |
| 121 A | xiv | |
| Trenton formation on | 104 B | xiii |
| lake, NEAR SIEBANDOWAN | | |
| LAKE, TH. B. D. | 118, 125 | v |
| Minneapolis, U.S. | | |
| Brick pavements in | 108 | iii |
| Minnehaha lake, S. OF WABIGOON | | |
| LAKE, R. R. D. | 10 | vi |
| 121 | vii | |
| Gold Mining Co. | 10 | viii |
| Mining and Smelting Co. | | |
| Capital and date of charter | 25 A | xiv |
| Work by, 1906 | 44 A | xvi |
| Minnesota, U.S. | | |
| Agassiz lake in | 202 | v |
| Area of | 193 | v |
| Gold mining in, 1896 | 6 Bull. | i |
| 117 | vi | |
| Indian reserve in, notes on | 166 | v |

| | Page | Vol. |
|---|------------|------|
| Minnesota, U. S. — <i>Con.</i> | | |
| Iron in, boring for, cost of | 231 | v |
| exhaustion possible | 24 | xi |
| 8 A | xiii | |
| mining, 1892 | 66 | ii |
| notes by Winchell Bros. | 53 | ii |
| production, 1884-1888 | 208 | R C |
| 1892-3 | 146 | iii |
| cost | 10 | i |
| range of, <i>See</i> Minnesota-Ver- | | |
| million iron range. | | |
| Laccolithic sills in | 256 A | xiv |
| Mining laws in | 7, 12, 13 | i |
| Oil in, flash test for | 164 | R C |
| Railways in, subsidized | 241 | R C |
| Syncline of | 76 | iii |
| bay, IRON LAKE, MICHIPICO- | | |
| TEN DIV. | | |
| Cherts on | 319 A | xiv |
| Iron near | 317, 318 A | xiv |
| siderite, analysis | 320 A | xiv |
| Minor ref. to | 291 A | xiv |
| Phyllite near | 343 A | xiv |
| copper mine, ONTONAGON REG., | | |
| U.S. | 85 | iii |
| Iron Co. | | |
| Data by, <i>re</i> cost of drilling | 232 | v |
| Fault on claim of, near Iron lake. | 311 A | xiv |
| Operating in Michipicoten div. | 95 | xi |
| 319 A | xiv | |
| Rocks on claim of | 317, 318 A | xiv |
| Ontario Gold Mine Co. | | |
| Capital and date of charter | 10 | ix |
| =Vermilion iron range. | | |
| <i>See also</i> Minnesota, iron. | | |
| Compared with that of Boston tp. | 262 A | xiv |
| Hutton tp. | 319 | xii |
| Michipicoten div. | 183 | ix |
| 195 | x | |
| 175 | xi | |
| 299 A | xiv | |
| Extension of, into Ontario | | |
| 64, 68, 144, 145, 205 | R C | |
| 176 | i | |
| 65 | ii | |
| 163 | ix | |
| 200 | x | |
| 24, 128, 175 | xi | |
| Mining laws in | 13 | i |
| Notes on, by Coleman | 152, 153 | ix |
| Merritt, with diagrams. | | |
| 123-125 | R C | |
| Ore of, analysis | 75 | ii |
| origin | 53 | ii |
| 199 | x | |
| Production, 1884-1888 | 226 | R C |
| 1892-93 | 146 | iii |
| "Minnie M" s.s. | 62, 67 | xi |
| 51, 55 | xii | |
| 53 A | xiii | |
| Minissinaqua lake and river, ALG. | | |
| Notes on, by Parks | 126, 127 | ix |
| Route from, to Ground-hog river, | | |
| description | 130, 131 | ix |
| Minnitaki lake, R. R. D. | | |
| Character of country near | 176 | vii |
| Clay on | 90 | v |
| Description and geology | 56-58 | v |
| Glacial striae on | 88 | v |

| | Page. | Vol. |
|--|-----------|---------|
| Minnitaki lake, R. R. D — <i>Con.</i> | | |
| Gold mining on, 1896..... | 6 | Bull. i |
| | 267 | vi |
| 1897..... | 78, 179 | vii |
| 1898..... | 69-72 | viii |
| 1899..... | 64 | ix |
| Iron pyrites near..... | 47 | A xv |
| mining..... | 20, 61 | A xv |
| Rocks on and near..... | 170, 171 | vii |
| Huronian..... | 18 | R c |
| | 165, 171 | vii |
| petrographical notes..... | 95 | v |
| schists, auriferous..... | 87 | v |
| Route from, to Wabigoon, description..... | 171, 172 | vii |
| Sands on, stratified..... | 93 | v |
| Minto (A L 200) gold mine, ISLAND FALLS, SEINE RIVER. | | |
| Notes on, 1903..... | 71, 72 | A xiii |
| 1904..... | 57 | A xiv |
| 1905 and photos..... | 48-50 | A xv |
| 1906..... | 56 | A xvi |
| <i>See also</i> Reading Mining Co. | | |
| gold mine, S. OF WAWA LAKE, MICHIPICOTEN DIV. | | |
| Iron ore in..... | 183 | A xv |
| Work by, 1899..... | 114 | ix |
| 1900..... | 139 | x |
| tp., WELLINGTON CO. | | |
| Brick yards in. <i>See</i> Drew. | | |
| Mirador mine, JALISCO, MEXICO. | | |
| Cobalt minerals in..... | 71 | B xiv |
| Miron, Joseph..... | 135 | A xiii |
| Louis..... | 132 | viii |
| | 135 | A xiii |
| lake, N. OF L. SUPERIOR, TH. B. D. | | |
| Brulé patches near..... | 296 | A xiv |
| Rocks on..... | 349 | A xiv |
| Mirrors. | | |
| Acetylene for..... | 33 | v |
| Miry lake, S. OF SHEBANDOWAN LAKE, TH. B. D..... | 127, 128 | v |
| Misemikowish (Beaver-house) lake, Nip. | | |
| Country around, character..... | 215 | xi |
| Description of, by Miller..... | 222 | xi |
| Mishawashkong river. <i>See</i> Mada-waska river. | | |
| Mishewawa lake, MICHIPICOTEN DIV., ALG. | | |
| Iron formation on and near..... | 180, 181, | A xv |
| | 204 | A xv |
| Michipicoten schists on..... | 202 | A xv |
| Mispickel. | | |
| <i>See also</i> Arsenic. | | |
| Arsenic from..... | 72 | R c |
| Association of, with gold..... | 38 | iv |
| eastern Ont..... | 203 | xi |
| views of Stewart..... | 111 | R c |
| Composition of..... | 204 | xi |
| Crystallography of..... | 187 | ii |
| Determination of..... | 204, 221 | vi |
| Foreign countries..... | 101, 102 | xi |
| Grant co., Oregon..... | 71 | B xiv |
| Joachimsthal, Bohemia..... | 61 | B xiv |

Mispickel.—*Con.*

| | Page. | Vol. |
|---|----------|-----------|
| Occurrences..... | 205 | ix |
| Paper by Wells..... | 102-106 | xi |
| Treatment of ore containing..... | 110 | R c |
| | | |
| Actinolite, Ont..... | 56 | xii |
| Coleman tp..... | 12 | B xiv |
| Dinorwie (near)..... | 125 | vii |
| Edgeware island, L. Huron..... | 109 | R c |
| Graham tp., analysis..... | 205 | ix |
| Hastings co. :— | | |
| associated with gold..... | 55 | iii |
| | 200 | xi |
| Lake and Tudor tps..... | 205 | ix |
| Madoc tp..... | 28, 107 | R c |
| Marmora tp..... | 66, 110 | R c |
| | 52 | iii |
| auriferous..... | 205 | ix |
| photo..... | 112, 113 | xi |
| notes by Miller..... | 197, 198 | xi |
| Kaladar tp..... | 201 | xi |
| Lake of the Woods, in gold ores. | | |
| | 116, 118 | R c |
| Pipestone pt..... | 31 | iii |
| Port Arthur dist..... | 57, 58 | B xiv |
| Rainy Lake dist., scarce..... | 74 | iv |
| Ramsay tp..... | 146 | R c |
| Sault Ste. Marie dist..... | 59 | R c |
| Steep-rock portage, Missinaibi river..... | 256 | v |
| Timagami dist..... | 205 | ix |
| Arsenic lake..... | 73 | A xiv |
| | 88 | A xv |
| Net lake..... | 173 | ix |
| | 179 | x |
| | 101 | A xiii |
| | 87, 88 | A xv |
| Grey siding..... | 74 | A xvi |
| prospecting near..... | 23 | A xv |
| Timagami (near), analysis..... | 23 | B xiv |
| lake, Austin bay, 174, 179 | | x |
| Wanapitei lake, with gold..... | 27 | R c |
| Misquamihie lake, TATATICHAPIKA RIVER..... | 128 | ix |
| Missinaibi, MICHIPICOTEN DIV., ALG. | | |
| Coal wrongly reported at..... | 136, 149 | vii |
| Dialase from, petrography..... | 149 | vii |
| Explorations between, and Trudeau, paper by Berton..... | 241-258 | v |
| H. B. C. post at..... | 3, 13 | Bull. iii |
| | 185 | vii |
| Huntelite near..... | 200 | ix |
| Indians at, photo..... | 201 | A xv |
| Photo of..... | 204, 205 | vii |
| Pictographs at..... | 186 | vii |
| Rocks at and near..... | 188 | vii |
| Huronian..... | 253 | v |
| Route from to :— | | |
| Magpie lake, description..... | 197-199 | vii |
| river..... | 294, 295 | A xiv |
| Michipicoten..... | 193-197 | vii |
| Wawa..... | 201, 202 | A xv |
| lake, MISSINAIBI RIVER, ALG. | | |
| Forest fires around..... | 142 | ix |
| Notes on, by Parks..... | 140 | ix |
| Rocks on..... | 250 | v |

| | Page. | Vol. | | Page. | Vol. |
|--|----------|-----------|--|-------------|--------|
| Missinaibi river, MOOSE RIVER, ALG. | | | Mississauga River Gold Mg. Co. | | |
| Agricultural land near..... | 114 | iv | Capital and date of charter..... | 11 | vii |
| clay belt, width..... | 175 | A xiii | Mississagi (MISSISSAUGA), L. HURON, | | |
| Distance from, to Opasatika lake..... | 181 | A xvi | ALG. | | |
| Falls of..... | 145 | A xiii | Iron ore at..... | 143 | R C |
| Forest fires on..... | 177 | A xiii | river, L. HURON. | | |
| Gypsum on..... | 45, 70 | R C | Agricultural land in valley of.... | 152 | viii |
| | 178 | i | Arkose rocks E. of..... | 74 | i |
| Kaolin on, and in tribs..... | 70 | R C | Copper mining on..... | 25 | vii |
| | 4, 173 | i | | 18, 37, 148 | viii |
| | 127 | iv | Explorations on, report by Graton. | 157-172 | xii |
| | 160 | A xiii | | 39 | iii |
| exhibited at World's Fair..... | 189 | ii | Fault from, to Echo lake..... | 149 | viii |
| Kaolinite in..... | 200 | ix | Gold on, placer mining..... | 23 | xi |
| Lignite on..... | 52, 70 | R C | Iron on..... | 119 | iv |
| | 178 | i | Lumbering on..... | 202 | v |
| | 188, 194 | viii | Minor ref..... | 136, 137 | viii |
| notes by J. M. Bell..... | 161, 162 | A xiii | Photos..... | 160, 161 | xii |
| Gibson..... | 124, 125 | iv | Terraces on..... | 152 | viii |
| sketch map showing..... | 163 | A xiii | Waterpower on..... | 25, 252 | vii |
| tributaries, probability of..... | 174 | A xiii | | | |
| Low land at headwaters of, alti- | | | Mississauga Mining Co. | | |
| tude..... | 9 | Bull. iii | Capital and date of charter..... | 9 | x |
| Marine deposits on..... | 157 | vi | Mississippi iron mine, LAVANT TP., | | |
| fossils..... | 50 | R C | LANARK CO. | | |
| Minor ref. to..... | 201 | v | Minor ref. to..... | 59 | ii |
| Natural gas on..... | 128 | iv | Notes on, by Folger..... | 135 | R C |
| | 198 | ix | lake, LANARK TP., LANARK CO. | | |
| Notes on, by Parks..... | 194, 195 | viii | Peat east of..... | 190 | i |
| | 139, 140 | ix | Mining Co. | | |
| Photos of, 144, 145, 176, 177, 224, 225 | A xiii | | Capital and date of charter..... | 10 | vii |
| Portages on..... | 105 | iv | river, ONT. | | |
| Rocks on and near..... | 138 | A xiii | Crystalline limestone on..... | 221 | viii |
| glacial age..... | 143 | A xiii | Field prospecting on, notes by | | |
| limestone, Corniferous.... | 47 | R C | Miller..... | 218 | v |
| fossiliferous.... | 32 | B xiii | Mica-schists on..... | 101 | B xiii |
| Route to, from Trout river, des- | | | Waterpower on..... | 390 | R C |
| cription..... | 137-139 | ix | Missouri, U. S. | | |
| Sand on, for glass-making..... | 128 | iv | Lithographic stone in, analysis. | 181, 182 | ii |
| Terraced valleys on..... | 147 | A xiii | University. | | |
| Trading post on, French..... | 196 | v | Notes on, by Richards..... | 511 | R C |
| Trees on and near..... | 176 | A xiii | Missus lake, MANITOU LAKE REG., | | |
| pine..... | 119 | iv | R. R. D. | | |
| Tributaries of..... | 145 | A xiii | Keewatin formation on.... | 49, 50, 62 | iv |
| Water of, clear..... | 190 | viii | Route from, to Pipestone lake, | | |
| Waterpower on..... | 252 | vii | notes..... | 88 | iv |
| Mission, The, MICHIGOTEN RIVER, | | | Mist inlet, L. OF THE WOODS. | | |
| ALG. | | | Notes on, by Coleman..... | 103 | vi |
| Biotite pierite from..... | 191 | A xv | Mistassini lake, MISTASSINI DIST., | | |
| Character of river near..... | 176 | A xv | QUE. | | |
| Founding of..... | 175 | A xv | Copper on..... | 24 | R C |
| Iron formation near..... | 177, 201 | A xv | Huronian on..... | 18 | R C |
| Pleistocene deposits near..... | 184 | xi | | 204 | v |
| | 196-198 | A xv | | 159 | A xv |
| Missions. | | | Mistoogo river, ABITIBI RIVER. | | |
| Diocese of Moosonee..... | 192 | viii | Description of..... | 202 | A xiv |
| Fort Frances (near)..... | 162 | v | Minor ref. to..... | 232 | A xiv |
| Garden River..... | 122 | viii | Ravines on..... | 199 | A xiv |
| Lac Seul, Kee..... | 61 | v | Timber on..... | 203 | A xiv |
| Lost lake, R. R. D..... | 60 | v | Mitchell, Arthur | | |
| Mackinac island..... | 109 | v | Manager, Helen iron mine..... | 138 | x |
| Michipicoten river..... | 298 | A xiv | See also Powell and Mitchell. | | |
| See also Mission, The | | | C. W. | | |
| Mississauga Forest Reserve Mg. | | | Gold mining by, Manitou lake. . | 84 | vi |
| div. | | | | | |
| Creation of..... | 36 | A xvi | | | |
| Description of..... | 44 | A xvi | | | |

| | Page | Vol. | | Page | Vol. |
|--|---------------|------|---------------------------------------|------------|------|
| Mitchell, George | | | Mohawk river, N. Y. | | |
| Evidence by, before R. C. P. :— | | | Glaciation on | 238 A | xiii |
| gold mining, L. of the Woods. | | | beaches, Algonquin | 235, 236 A | xiii |
| 64, 117, 446 | R C | | Iroquois | 233 A | xiii |
| mining laws | 313 | R C | Waterpower at | 485 | R C |
| J. | 104 | viii | Mohr, A. T. | 60 | ix |
| | 117 | ix | Mohs, Friedrich | | |
| J. A. | 162 A | xiv | Scale of hardness by | 201 | vi |
| James | | | Moir gold mine, MADOC TP., | | |
| Mica mining by, Fergusson tp. | 280 | v | HASTINGS CO. | 111 | R C |
| James B. | 100 | ix | Gold Mining Co. | | |
| John | 201, 206-209 | iv | Report to, of Belmont gold mine. | 50, 51 | iii |
| Mary E. | 104 | viii | lake, MADOC TP., HASTINGS CO. | | |
| | 117 | ix | Garnet on | 198 | ix |
| | 143 | x | Rutile on island in | 298 | ix |
| R. E. | 241 | ii | Talc mining on | 205 | xi |
| William | 31 | ix | Trenton formation on | 27, 89 B | xiii |
| Mitchell, LOGAN TP., PERTH CO. | | | river, MADOC TP., HASTINGS CO. | | |
| Boring at, for salt | 54, 185 | R C | Bannockburn gold mill site on | 264 | v |
| farm, WOODSLEE, ROCHESTER | | | Granite on | 53 | iii |
| TP., ESSEX CO. | | | contact with diorite | 194 | xi |
| Boring near, for oil, log | 111 A | xv | Iron ore east of | 42 | ii |
| iron claim, N. CROSBY TP., | | | Trenton formation on | 89 B | xiii |
| LEEDS CO. | 49 | ii | Moisie, SAGUENAY CO., QUE. | | |
| silver claim, NEAR HAILEY- | | | Charcoal furnace at | 325 | xii |
| BURY, NIP. | 34, 35 A | xvi | Titamic iron ore at | 189 | v |
| Mitchener (OR HAMILTON) nickel | | | river, GULF OF ST. LAWRENCE. | | |
| mine, NEAR WORTHINGTON, | | | Magnetic sand of, notes by Bell | 491 | R C |
| DRURY TP., ALG. | | | Moissan, H. | | |
| Rocks in | 30, 31, 114 C | xiv | Experiments by, on calcium car- | | |
| borite | 272 | xii | bide | 165 | iv |
| Mitella nuda. | | | Mokaki lake, BETWEEN OPASATIKA | | |
| Abitibi Lake dist. | 241 A | xiv | AND KAPUSKASING RIVERS, | | |
| Mattagami valley | 150 A | xv | ALG. | 144 A | xiii |
| Mixer, C. T. | | | Mokoman station, CONNREE TP., | | |
| Analysis by, of nickel minerals. | 165, 166, | ii | TH. B. D. | | |
| Chemist to Emmens Metal Co. | 168 | ii | Pyrates near | 172 A | xvi |
| Whartonite found by, Sudbury | | | Molin, William | | |
| dist. | 169 | ii | Analysis by, of iron ore, Snow- | | |
| Moccassin mine, NEAR ROSSPORT, | | | don tp. | 81 | ii |
| TH. B. D. | | | Notes by, on Belmont iron de- | | |
| Notes on, 1900 | 109, 110 | x | posit | 80 | ii |
| Mocon gold mine, JACKFISH BAY, | | | Mollath, John | 249 | xi |
| L. SUPERIOR. | | | | 52 A | xiv |
| Notes on, 1896 | 206 | vi | Molle lake, NIP. | | |
| Modern Brick and Stone Co. | | | Black bear on | 127 A | xiii |
| Capital and date of charter | 26 A | xv | Molluscoides, | | |
| Modiolopsis modiolaris. | | | Anderdon tp. | 125 | xi |
| Gore Bay | 77 B | xiii | Molson, Markland | | |
| Modiomorphus. | | | Iron smelting by, Moisie river. | | |
| Kwatabohegan river, notes | 188 A | xiii | Que. | 491 | R C |
| photos | 192 A | xiii | Moltke, F. | 105 | vii |
| Modum, NORWAY. | | | Molybdenite AND Molybdenum. | | |
| Colour works at | 89 B | xiv | Apatite deposits | 442 | R C |
| Moffat, Miss Anne | 6 | x | Description of | 538 | R C |
| E. S. | | | Hardness of | 201 | vi |
| Ref. to paper by, on concentra- | | | Lac Seul, Kee. | 61 | v |
| tion of iron ores | 320 | xii | Middlesburg dist., Transvaal | 70 B | xiv |
| Moffatt, Hon. George | 127 | vi | Norway | 67 B | xiv |
| Mogok, BURMA. | | | Notes by Miller | 232 | vii |
| Rubies near | 241 | viii | Production of, 1902 | 12, 25 | xii |
| Mogotherium gold mine. Misprint | | | 1903 | 2 A | xiii |
| for Megatherium gold mine. | | | | 6 A | xvi |
| Mohawk Mining Co. | | | | | |
| Capital and date of charter | 11 | vii | | | |
| Natural Gas Co. | | | | | |
| Capital and date of charter | 24 A | xiii | | | |

| | Page. | Vol. | | Page. | Vol. |
|---|----------|------|--|--------------|------|
| Molybdenite and Molydenum. — <i>Con.</i> | | | Mond Nickel Co. | | |
| Specific gravity of..... | 201 | vi | <i>See also</i> Little Stobie m. | | |
| Uses of..... | 218 | vi | Mond, Dr. Ludwig | | |
| | 46 | xi | North Star m. | | |
| <hr/> | | | Accidents at mines of..... | 33 A | xv |
| Ansthruther tp..... | 56 | xii | | 34, 35 A | xvi |
| Belmont tp..... | 57 | xii | Bins of, photo..... | 272, 273 | xi |
| Crosby, N. tp..... | 205 | ix | Boring plant purchased by..... | 42 A | xiii |
| Dungannon tp..... | 205 | ix | Capital and date of charter..... | 10 | x |
| Foley tp..... | 167 | ix | Exhibits of, at Pan-American | | |
| Haliburton co.:— | | | Exhibition..... | 86 | xi |
| Harcourt tp..... | 205 | ix | Future of, good..... | 144 C | xiv |
| Lutterworth tp..... | 57 B | xiii | History of..... | 142, 143 C | xiv |
| notes by Mills..... | 45, 46 | xi | Operating, Sudbury dist..... | 20, 21 | xi |
| Lake of the Woods region..... | 62 | B C | | 125 | xii |
| Quarry island..... | 14 | iii | | 68, 72 A | xiv |
| Shoal lake..... | 106 | vi | | 15, 28 C | xiv |
| Lake Superior, N. shore:— | | | Garson tp..... | 66 | xv |
| Black river..... | 61 | R C | | 39, 66, 67 A | xvi |
| copper-bearing rocks..... | 131 | vi | Victoria mines..... | 11, 12 A | xv |
| Terrace cove..... | 205 | ix | idle..... | 59 A | xiii |
| Laxton tp..... | 25 | xii | Production, 1902..... | 17, 19 | xii |
| Miller tp..... | 205 | ix | 1903..... | 6 A | xiii |
| Molybdenite lake..... | 354 A | xiv | 1906..... | 14 A | xvi |
| Monteagle tp..... | 205 | ix | increasing..... | 56 A | xvi |
| Renfrew co., at World's Fair..... | 187 | ii | Mondoux, O. | | |
| Calabogie, near..... | 55 | xii | gold mine, RATHBUN TP., NIP. | | |
| Renfrew co., Craigmont..... | 43 A | xv | Notes on, 1894..... | 263 | v |
| Ross tp..... | 194 | ii | <i>Moneses grandiflora.</i> | | |
| | 205 | ix | Abitibi Lake dist..... | 241 A | xiv |
| Worthington mine, Sudbury..... | 161 C | xiv | Mattagami valley..... | 150 A | xv |
| lake, MICHIGICOTEN DIV., ALG. | | | Monier, Emile | | |
| Length of..... | 289 A | xiv | Ref. to work by, on strengthen- | | |
| Molybdenite on..... | 354 A | xiv | ing of concrete..... | 176 A | xiv |
| Molybdite (Molybdic ochre). | | | Monkton, LOGAN TP., PENTH CO. | | |
| Ross tp..... | 194 | ii | Brick making at..... | 94 B | xv |
| | 205 | ix | Monmouth tp., HALIBURTON CO. | | |
| "Monadnock" s.s. | | | Apatite in..... | 173 | R C |
| Amount of..... | 149 | iii | | 194 | ix |
| "Monarch" s.s. | 40 | iv | Grenville series in..... | 56 B | xiii |
| Monarch gold mine, HELLDIVER | | | Iron ore in, analysis..... | 62 | ii |
| RAY, L. OF THE WOODS. | | | | 202 | ix |
| Notes on, 1897..... | 33, 121 | vii | railway for developing..... | 61 | ii |
| Mining Co. | | | Nepheline-syenite in..... | 215 | viii |
| Capital and date of charter..... | 9 | x | Monmouthshire, WALES. | | |
| Monazite. | | | Coal in, royalty on..... | 36 | i |
| Hardness and specific gravity of..... | 202 | vi | Monnell, Ambrose | 22 | xi |
| Notes on, by Goodwin..... | 218 | vi | Mono Mills, ALBION TP., PEEL CO. | | |
| Monclova, LUCAS CO., OHIO. | | | Terrace near, altitude..... | 177 | ix |
| Cincinnati arch near..... | 116 | i | tp., DUFFERIN CO. | | |
| Moncrieff tp., ALG. | | | Cambro-Silurian in..... | 39 B | xiii |
| Diabase dike in..... | 76 | i | Sandstone quarrying in..... | 99 | i |
| Mond, Dr. Ludwig | | | notes..... | 110 | ix |
| <i>See also</i> Mond Nickel Co. | | | <i>Monohammus confusor.</i> <i>See</i> Pine borer. | | |
| Claims of, Sudbury dist.:— | | | " <i>scutellatus.</i> <i>See</i> Pine borer. | | |
| idle, 1899..... | 99 | ix | <i>Monotropia hypopitys.</i> | | |
| Vermilion mine..... | 53 | x | Abitibi Lake dist..... | 241 A | xiv |
| Victoria mine..... | 36, 124 | x | Mattagami valley..... | 151 A | xv |
| Photo of..... | 143 C | xiv | " <i>uniflora.</i> | | |
| Process of, for nickel extraction:— | | | Abitibi Lake dist..... | 241 A | xiv |
| notes by Blue..... | 7 | viii | Mattagami valley..... | 151 A | xv |
| paper on, by Roberts-Austen. | 106-120 | viii | Monroe co., MICH. | | |
| plans and section to illustrate. | 112, 113 | viii | Limestone in, quality..... | 43 B | xiii |
| speech by, on..... | 117, 120 | viii | Mons, BELGIUM. | | |
| Process of, for nickel-plating..... | 159 | ii | Peat used in, for sanitation..... | 216 | ii |
| Volatility of nickel in carbonic- | | | Monsarrat, N. S. | 117 | ix |
| oxide discovered by..... | 146 | ii | | 143 | x |
| | | | | 74 | xi |

| | Page. | Vol. |
|--|------------|------|
| Montague, J. A. | | |
| Copper prospecting by, Whiskey Lake dist. | 67 A | xiv |
| | 69 A | xv |
| Manager for Northern Ontario Copper Co. | 69 A | xv |
| | 70 A | xvi |
| J. W. | 105 | vii |
| tp., LANARK CO. | | |
| Iron mining in..... | 142 | R C |
| Montataire, OISE DEPT., FRANCE. | | |
| Nickel-steel made at..... | 165 C | xiv |
| Montalba loc., WALLACE MINES, ALG. | | |
| Notes on, by Merritt | 91 | R C |
| Montalhatti, Joseph | 123 | vii |
| Montana, U.S. | | |
| Clay from, analysis..... | 120 | iii |
| Corundum in..... | 213, 215 | vii |
| Mining laws of, notes..... | 282 | R C |
| Montcalm co., QUE. | | |
| Grenville series in..... | 11 | R C |
| Monte Christo gold mine, SNOAL LAKE, L. OF THE WOODS. | | |
| Notes on, 1896..... | 107 | vi |
| Monte Diabolo, CALIFORNIA. | | |
| Coal at..... | 175 A | xiii |
| Monteagle tp., HASTINGS CO. | | |
| Apatite in | 194 | ix |
| Biotite in | 195 | ix |
| Chabazite in | 196 | ix |
| Corundum in | 84 A | xvi |
| notes by Blue..... | 246 | viii |
| Miller..... | 220-222 | viii |
| probability of..... | 224 | vii |
| Molybdenite in | 205 | ix |
| Nepheline-syenite in | 250 | viii |
| Pyrrhotite in | 207 | ix |
| | 200 A | xvi |
| Montenaro, Gustenzo | 31 A | xv |
| Montgomery, Alexander | 515-521 | R C |
| Mrs. W. | 24 | viii |
| William N. | | |
| Evidence by, before R. C. re:— | | |
| Crown Point mine | 201 | R C |
| mining laws | 312 | R C |
| want of railways..... | 240 | R C |
| Killed..... | 24, 25, 98 | viii |
| Montgomery, MONTANA, U.S. | | |
| Paving clay from, analysis..... | 120 | iii |
| tp., ALG. | | |
| Copper in | 23 | xi |
| See also Huston mine..... | 98 | xii |
| Monticulipora. | | |
| Abitibi river..... | 187 | viii |
| Anderdon tp | 125 | xi |
| Montizambert, TH. B. D. | 242 | v |
| Montreal, QUE. | | |
| Anorthosite N. of..... | 11 | R C |
| C. P. R'y. from, to Vancouver, opening | 171 | v |
| Car wheel foundries in..... | 329 | R C |
| Glaciation around, direction.... | 49 | R C |
| Labradorite N. of | 11 | R C |
| Leda clay of | 216 | x |
| Natural gas near | 126 | i |
| Nepheline rocks of, ref. to | 213 | xi |
| Oil refinery at | 157 | R C |
| Privy pits of, tests of moss-litter in..... | 191 | vi |

| | | |
|--|---------------|------|
| Montreal and Boston Consolidated Mg. and Smelting Co. | | |
| Capital and date of charter ... | 24 A | xiii |
| and Ottawa Peat Co. | | |
| Capital and date of charter..... | 24 A | xiii |
| Car Co. | 329 | R C |
| Cobalt Mg. Co. | | |
| Capital and date of charter | 28 A | xvi |
| island, L. SUPERIOR. | | |
| Sandstone on | 131 | viii |
| -Manitou Mines Co. | | |
| Capital and date of charter | 10 | ix |
| Mining Co. | | |
| Apatite mining by, Bobs lake... 239 | | i |
| See also Bobs lake. | | |
| Area acquired by | 256 | R C |
| transferred to Sibley Syn..... | 141, 143, 157 | vi |
| Mg. Co. | | |
| Assignees of Woods' location. 127, 139 | | vi |
| Bruce mines worked by:— | | |
| evidence before R. C..... | 95-97 | R C |
| notes by Palmer..... | 174 | ii |
| Copper mining by:— | | |
| Gargantua cape..... | 206 | vii |
| Mamainse pen | 98 | R C |
| | 129, 130, 241 | ii |
| | 73 | iii |
| report by Borron..... | 64-66 | iii |
| Silver Islet mine worked by.... | 34 | R C |
| evidence before R. C. 93, 195, 197 | | R C |
| sale of mine..... | 95 | R C |
| Reduction and Smelting Co. | | |
| Plant built by, North Bay..... | 12 A | xvi |
| river, L. SUPERIOR, ONT. | | |
| Beaches at mouth of..... | 153, 155 | viii |
| | 176 | ix |
| Iron ore reported near..... | 23 | R C |
| Notes on, by Charlton, jun., 197-199 | | viii |
| Coleman..... | 130 | viii |
| Photo of mouth of..... | 168, 169 | viii |
| Shores in vicinity of, description. 130 | | viii |
| river, L. SUPERIOR, U. S. | | |
| Rocks on..... | 83 | iii |
| river, OTTAWA RIVER. | | |
| Basin of, notes by Burwash... 173-176 | | vi |
| Copper on | 24, 57 | R C |
| east branch..... | 91 | i |
| Falls of, photo..... | 236 A | xiv |
| Iron on..... | 127 | iv |
| hematite..... | 15 A | xv |
| pyrites, assay..... | 209 A | xiv |
| specular..... | 142 | R C |
| Marl from N. of, analysis | 209 A | xiv |
| Minor ref. to..... | 201 | v |
| Prospecting on, follows Cobalt discoveries..... | 8 A | xvi |
| Rocks on and near:— | | |
| arkose..... | 74 | i |
| gneiss..... | 69 | i |
| greenstone..... | 75 | i |
| Huronian..... | 71 | i |
| | 124 | iv |
| disturbed..... | 17 | R C |
| quartzite..... | 20 | R C |
| Keewatin..... | 44 B | xiv |
| limestone..... | 81-83 B | xiii |
| dolomite..... | 81 | i |
| serpentine..... | 81 | i |

| | Page. | Vol. |
|---|----------|--------|
| Montreal river. —Con. | | |
| Smaltite on..... | 11 | A XV |
| Striae on..... | 181 | vi |
| Terraces at mouth of..... | 172 | ix |
| Trout in..... | 172 | ii |
| V-shaped turns in..... | 36 | B XIV |
| Water-power on..... | 252 | vii |
| | 14 | A XV |
| River Mining div. | | |
| Creation of..... | 36 | A XVI |
| Description of..... | 45, 46 | A XVI |
| River Silver Syndicate. | | |
| Capital and date of charter..... | 30 | A XVI |
| Montrose tp., WELLAND CO. | | |
| Limestone in. <i>See</i> Niagara Falls. | | |
| Monzonite. | | |
| Mijnemungshing lake..... | 179, 191 | A XV |
| Moodie, John | 222 | ix |
| Moody, George | | |
| Brick-yard of, notes and photo.. | 73 | B XV |
| tp., NIP. | | |
| Soil in, muskeg..... | 187, 209 | A XIV |
| requires drainage..... | 207 | A XIV |
| Trees in..... | 233, 235 | A XIV |
| Mook, J. H. | | |
| Oil well drilling by, Stratford... | 110 | A XV |
| Moon, George C. | 156 | vi |
| bay, L. OF THE WOODS, R.R. | | |
| D..... | 232 | ii |
| lake, MICHIPICOTEN DIV. <i>See</i> | | |
| Talbot lake | | |
| river, P. S. D. | | |
| Copper prospecting in..... | 121 | x |
| Moonshine lake, NEAR MANITOU | | |
| LAKE, R.R.D. | 123 | vii |
| Moonstone. | | |
| Definition of..... | 538 | R C |
| Moor, William. | 39, 40 | iii |
| Moore, Charles | | |
| Silver discovered by, L. of the | | |
| Woods..... | 64 | R C |
| Sultana mine partly owned by.. | 16 | iii |
| D. H. | | |
| Pent plant installed by, Victoria | | |
| Road..... | 23 | A XIV |
| E. S. | | |
| Description by, of Goetz iron | | |
| claim..... | 181 | A XV |
| Report by, on: | | |
| Iron ranges E. of L. Nipigon. | | |
| 136-148 | A XVI | |
| ref. to..... | 2, 17 | A XVI |
| Iron Ranges, Eastern Michipi- | | |
| coten div..... | 200-206 | A XV |
| Work by, 1905..... | 15, 175 | A XV |
| 1906..... | 105 | A XVI |
| E. V. | | |
| Pent plant erected by, Victoria | | |
| Road..... | 23 | A XIV |
| Edward (lumberman)..... | 106 | R C |
| Edward (miner)..... | 55 | A XIII |
| F. W. | | |
| Gold prospecting by, L. of the | | |
| Woods..... | 21, 25 | iii |
| H. H. | 110, 117 | vii |
| John | | |
| Discoverer of Black Donald graph- | | |
| ite mine..... | 31 | v |
| | 53, 54 | A XIII |

| | Page. | Vol. |
|-------------------------------------|----------|--------|
| Moore, J. T. | 67 | viii |
| | 78 | x |
| Joseph | 128, 142 | ix |
| Nathaniel D. | | |
| Evidence by, re free trade..... | 233 | R C |
| phosphate, Syd- | | |
| enham dist.... | 171 | R C |
| Thomas | 55 | A XIII |
| W. | 56 | xii |
| bay, L. OF THE WOODS, R.R.D. | 117 | R C |
| Contact veins near..... | 21 | iii |
| Minor ref. to..... | 21 | iii |
| iron mine, MADOC TP., HAST- | | |
| INGS CO. | 20, 47 | xii |
| lake, CREIGHTON TP., ALG. | | |
| Nickel-bearing eruptives near.... | 38 | C XIV |
| location, CRAIG TP., ALG. | | |
| Galena in..... | 92 | i |
| Oil and Gas Co. | | |
| Log of well drilled by..... | 112 | A XIV |
| tp., LAMBERTON CO. | | |
| Oil in..... | 20, 89 | A XIV |
| borings for..... | 112 | A XIV |
| production, 1905..... | 108 | A XV |
| 1906..... | 24 | A XVI |
| Salt in. <i>See</i> Courtright. | | |
| Moorehouse, J. J. | | |
| Promoter of smelter at Hamilton. | | |
| 29, 30 | iv | |
| James | 29 | iv |
| Moorehead Bros. & Co. | | |
| Wages paid by, statistics..... | 370 | R C |
| McLean & Co. | | |
| Labour employed by, statistics.. | 370 | R C |
| Turnover of, 1892-3..... | 119 | ii |
| Moose. | | |
| Abitibi dist..... | 193 | viii |
| | 105, 127 | A XIII |
| | 242, 253 | A XIV |
| Atikokan river..... | 144 | v |
| Blanche River region..... | 224 | xi |
| | 189 | xii |
| Hinterland, The..... | 133 | iv |
| Hudson Bay slope..... | 178 | vi |
| Lac des Mille Lacs..... | 135 | v |
| Lake Huron slope..... | 170 | vi |
| Matawin valley..... | 129 | v |
| Mattagami valley..... | 131 | A XV |
| Mand lake, L. of the Woods. 116, | 120 | vii |
| Michipicoten div..... | 297 | A XIV |
| | 200 | A XV |
| Mississagi River dist. (scarce)... | 172 | xii |
| Moose River basin..... | 178 | A XIII |
| Moss tp..... | 120 | v |
| Nipigon Lake dist..... | 139 | A XVI |
| Niven's base line and S. of..... | 142 | ix |
| Pigeon River dist..... | 147 | ix |
| Pontiac co., Que..... | 162 | x |
| Rainy Lake dist..... | 97 | iv |
| Timagami Lake region..... | 58 | R C |
| | 162 | x |
| bay, L. TIMISKAMING, NIP. | | |
| Slates on..... | 41 | B XIV |
| Creek, ROXBORO TP., STORMONT | | |
| co. | | |
| Gravel pit in..... | 219 | x |
| Trenton limestone near..... | 48, 111 | B XIII |

| | Page. | Vol. |
|--|----------|--------|
| Moose Factory, JAMES BAY. | | |
| Built, 1730..... | 196 | v |
| Customs returns from..... | 135 | iv |
| Glacial drift near..... | 143 | A xiii |
| Harbour at, possibility of..... | 191 | viii |
| Limestone at..... | 142 | A xiii |
| Marine deposits S. of..... | 137 | vi |
| Meteorological observations at..... | 106, 107 | iv |
| Moose near..... | 178 | A xiii |
| Notes on, by Parks..... | 191, 192 | viii |
| Sandstone near..... | 142 | A xiii |
| School at, Govt. grant to..... | 134 | iv |
| Soil south of..... | 114 | iv |
| | 176 | A xiii |
| gold mine, KOOKAGAMING LAKE, NIP. | | |
| Notes on, 1897..... | 140 | vii |
| island, JAMES BAY. | | |
| H. B. C. post on. <i>See</i> Ship Hole. | | |
| Indian camp on, photo..... | 200, 201 | viii |
| island, L. TIMISKAMING. <i>See</i> Bryson island. | | |
| lake, ALGOMA-NIPISSING BOUNDARY LINE. | | |
| Map of, sketch..... | 177 | vi |
| Rocks on..... | 179 | vi |
| Trees on..... | 176 | vi |
| lake, CAPREOL AND MACLENNAN TPS., NIP. | | |
| Nickel mining on..... | 285 | xi |
| | 273 | xii |
| Rocks near..... | 274 | xii |
| | 203 | A xiii |
| | 73, 115 | C xiv |
| conglomerate..... | 130, 132 | C xiv |
| lake, DRIFTWOOD RIVER, NIP. | | |
| Clays of, kaolinic..... | xii | A xiii |
| Moose on..... | 242 | A xiv |
| Notes on, by Kay..... | 108 | A xiii |
| Porphyritic rocks near..... | 120 | A xiii |
| Timber in district of..... | 124 | A xiii |
| lake, LEVACK AND MORGAN TPS., SUDBURY DIST. | | |
| Geology of vicinity..... | 198 | A xiii |
| Minor ref. to..... | 192 | A xiii |
| Rocks on and near..... | 68 | C xiv |
| granite, character..... | 84 | i |
| nickel eruptive, petrography..... | 211 | A xiii |
| norite, weathering of..... | 66 | C xiv |
| lake, SEINE RIVER, R. R. D. | | |
| Gold mining near..... | 81 | ix |
| Notes on, by Coleman..... | 77 | vi |
| lake, SOUTH OF WABIGOON LAKE, MANITOU LAKE DIST. | | |
| Gold mining on, 1900..... | 97 | x |
| Lake Mining and Milling Co. | | |
| Capital and date of charter..... | 9 | x |
| Work by, 1900..... | 97 | x |
| suspended..... | 250 | xi |
| mt., HUTTON TP., NIP. | | |
| Geology of, and vicinity..... | 219, 220 | A xiii |
| Iron on and near:— | | |
| analysis..... | 16, 70 | A xvi |
| notes on, by Coleman..... | 238, 299 | xii |
| | 216, 217 | A xiii |
| Miller..... | 61 | A xvi |
| paper on, by Leith, with map..... | 318-321 | xii |

Moose mt. — *Con.*

| | | |
|--|---------------|--------|
| Ore of, compared to that of Michipicoten div..... | 179, 180 | A xv |
| Rocks on..... | 204 | A xiii |
| Mountain, Ltd. | | |
| Capital and date of charter..... | 37 | A xiii |
| Work by, 1906..... | 39 | A xvi |
| river, JAMES BAY. | | |
| Basin of, character..... | 203, 204 | v |
| economic resources, report by J. M. Bell..... | 135-197 | A xiii |
| Corniferous formation W. of..... | 47 | R C |
| Country between, and Mattagami river, description..... | 114 | iv |
| French fort on..... | 197 | v |
| Gypsum deposits on and on tribs..... | 45, 69, 70 | R C |
| | 110, 178 | i |
| | 127 | iv |
| | 199 | ix |
| | 156, 157 | A xiii |
| | 32 | B xiii |
| analysis..... | 159 | A xiii |
| map showing..... | 155 | A xiii |
| photos..... | 160, 161 | A xiii |
| selenite..... | 208 | ix |
| Huronian on..... | 18 | R C |
| | 169 | i |
| Kaolin on tribs. of..... | 4 | i |
| Lignite on..... | 178, 181, 184 | i |
| | 203 | ii |
| | 219 | vi |
| | 201 | ix |
| analysis..... | 174 | A xiii |
| Mouth of, suitability for harbour, notes..... | 128, 129 | iv |
| Navigation on..... | 103 | iv |
| Notes on, by Parks..... | 190, 191, 194 | viii |
| Peat bogs on..... | 178, 191 | i |
| Salt on, possibility of..... | 32 | B xiii |
| Timber on..... | 119, 120 | iv |
| Tributaries of, parallel..... | 76 | i |
| Watershed of..... | 201 | v |
| Moosonee lake, KWATARGOAH EGAN RIVER, ALG. | | |
| Character of..... | 116 | A xiii |
| Minor ref. to..... | 137 | A xiii |
| Mora tp., PETERBOROUGH CO. | | |
| Old name for Belmont tp..... | 15 | ii |
| Moraine. | | |
| Definition of..... | 538 | R C |
| Ignace, near..... | 172 | vii |
| Lake Superior, north of..... | 50 | R C |
| Michipicoten river..... | 7 Bull. | iii |
| Nipigon river..... | 107 | A xvi |
| Sudbury dist..... | 102 | C xiv |
| United States, northern..... | 123 | ix |
| Moran, D.; P. AND Mrs. P. | | |
| | 105 | xii |
| | 104 | viii |
| | 117 | ix |
| Tony. | 54, 57 | xi |
| Morenosite. | | |
| Cobalt dist..... | xi | A xiii |
| Sudbury deposits..... | 163 | C xiv |
| Denison and Drury tps..... | 205 | ix |
| Wallace mine..... | 194 | ii |
| | 205 | ix |
| Moreson, Otto. | 100 | ix |
| Morgan, J. | 105 | vii |

| | Page. | Vol. | | Page. | Vol. |
|--|---------------|--------|---|----------|--------|
| Morgan, J. W. | | | Morris, William Dowler <i>See</i> Morris | | |
| Recorder, Port Arthur Mg. div. | 36 | A xvi | and Ballantyne. | | |
| Report by, on same. | 42 | A xvi | Zoie | 117 | ix |
| John | 139 | vi | and Bailey | 120 | ii |
| R. R. | 46 | v | and Ballantyne. | | |
| William Pritchard | | | Brick-yard of, Billings Bridge... | 61 | B xv |
| Evidence by, re royalties in | | | clay for, analysis..... | 31 | B xv |
| Wales and the Colonies..... | 44-46 | i | Morriseau, A. J. | | |
| lake, BARRIE TIL, FRONTENAC | | | Iron claim of, Pic river..... | 297 | viii |
| Co. | | | Licence to..... | 74 | xi |
| Conglomerate on..... | 202 | xi | Morrish, N. D. | 104 | viii |
| Rocks north of..... | 202 | xi | Morrison, A. M. | 143 | x |
| tp., SUDBURY DIST., ALG. | | | A. V. | 234 | xi |
| Glaciation in..... | 102, 106 | c xiv | Daniel | | |
| Gossan absent in N. E. part of... | 16 | c xiv | Manager, Crystal gold mine.... | 86 | vi |
| Nickel prospecting in..... | 152 | x | Decca gold mine..... | 68 | ix |
| Rocks in..... | 274 | xii | E. | 113 | x |
| greenstone | 75 | i | | 74 | xi |
| eruptive..... | 206 | x | Major, E. W. B. | 34, 35 | A xv |
| nickel-bearing eruptive | 200, 208 | A xiii | | 49-52 | A xvi |
| | 11, 62, 68-71 | c xiv | James | 39, 41 | A xiii |
| petrographical notes..... | 110 | c xiv | Peter | 48 | xii |
| Morin, J. | 117 | ix | T. | | |
| | 48 | A xiii | Marble working by, near Ban- | | |
| lake, ROBERTS TIL, ALG. | | | croft..... | 106, 107 | A xv |
| Iron ore on..... | 223, 224 | A xiii | T. F. | 62 | A xiii |
| tp., ALG. | | | W. H. | 104 | viii |
| Copper in..... | 23 | xi | W. J. | | |
| mining..... | 272 | xi | Evidence by, before R. C.:— | | |
| | 79, 80 | A xiii | apatite, N. Burgess tp..... | 173 | R C |
| Morland, Watson & Co. | | | barytes..... | 53 | R C |
| Peat used by, for smelting | 207 | i | graphite, N. Elmsley tp..... | 181 | R C |
| Morley, W. <i>See</i> next ref. | | | iron, Haliburton dist..... | 137 | R C |
| and Ashbridge. | | | marble, Frontenac co..... | 80 | R C |
| Brick making by, Toronto..... | 29 | xii | Morrow, J. | | |
| | 108 | B xv | Corundum prospecting by, S. | | |
| pyrites mine, NEAR SCHREI- | | | Sherbrooke tp..... | 225 | viii |
| BER, TIL, B. D. | | | Part owner, Blair mica mine.... | 290 | xi |
| Gossan from, analysis..... | 186 | A xvi | W. G. | 22 | ix |
| Limonite on timbers in, notes | | | Morse mt., NEAR PAINT LAKE, MICH- | | |
| and photo..... | 183, 184 | A xvi | PICOTEX DIV., ALG. | | |
| Notes on, by Fraleck..... | 177 | A xvi | Minor ref. to..... | 307 | A xiv |
| tp., R. R. D. | 167 | v | Rocks on..... | 314 | A xiv |
| Morningstar gas well, HUMBER- | | | iron bearing..... | 325 | A xiv |
| STONE, WELLAND CO. | | | Mortar. | | |
| Notes on, 1890 | 130 | i | Cement for making, notes on.... | 170 | A xiv |
| Morozewicz, Josef | | | Definition of..... | 171 | A xiv |
| Extracts from report by, on cor- | | | From Portland and natural cem- | | |
| undum..... | 229, 234-236 | viii | ents, compared..... | 163 | A xiv |
| Experiments by, on corundum, | | | Lime in manufacture of, notes | | |
| ref. to | 253 | viii | by Miller | 12 | B xiii |
| Morphet, Robert. | 140 | i | Making of, impervious..... | 173 | A xiv |
| Morrey, Samuel. | 27 | ix | Mortimer tp., NIP. | | |
| Morrill tariff bill. | | | Explorations in, by Kerr..... | 125 | A xv |
| Affecting nickel | 28 | vii | Peat in, analysis..... | 128 | A xv |
| Morriss, C. S. | | | Morton distillery, KINGSTON. | | |
| Acknowledgments to..... | 96 | vi | Analysis of water from well at.. | 204 | ix |
| Contractor, Harold Lake mine.. | 146 | v | lake, KIRCHEN AND ROBERT | | |
| Evidence by, before R.C..... | 318 | R C | TILS., ALG. | | |
| Gold mining by, L. of the Woods. | 40 | vii | Conglomerate on..... | 223 | A xiii |
| Notes by, on tenure of mineral | | | Morty, John. | 79 | x |
| lands | 48 | i | Mosa tp., MIDDLESEX CO. | | |
| Triumph mine owned by..... | 57 | vii | Oil prospecting in..... | 18, 21 | vi |
| Morris, Sir John | 175 | R C | boring record | 80 | B xiii |
| John | | | Moscow prov., RUSSIA | | |
| Iron mining by, Coe Hill..... | 103 | ix | Peat in..... | 217 | ii |
| Purchase by, of iron ore, for | | | Moseland, DENMARK. | | |
| Pennsylvania..... | 191 | iii | Peat experiments at..... | 211 | ii |
| L. M. | 120 | ii | | | |

| | Page. | Vol. | | Page. | Vol. |
|--|--------------|------|---|-------------------|------|
| Mosher, Dan | | | Moss tp., TH. B. D.—<i>Con.</i> | | |
| Gold prospecting by, Manitou Lake reg. | 87 | vi | Railway through, projected. | 133 | v |
| Iron mining by, Rainy lake. | 267 | xi | Sylvanite from, shown at World's Fair. | 191 | ii |
| Mosher bay called after. | 87 | vi | Mosser Tower cooler. | | |
| Part owner, Ferguson gold mine. | 80 | vi | Description of. | 132 A | xiv |
| John | | | Moths. | | |
| Part owner, Hillier gold mine. | 65, 156, 157 | v | Abitibi dist. | 129 A | xiii |
| Sale by, of certain claims. | 25 | iv | Motley, W. G. | | |
| Robert | 80 | vi | Acknowledgments to. | 103 | v |
| Rufus Bros. | 80 | vi | Manager, Regina gold mine. | 179-184, 238, 239 | v |
| Gold prospecting by, Abitibi lake. | 219 A | xvi | Reporting for an English Co. | 182 | v |
| bay, MANITOU STRAITS, R. R. D. | | | Moulding clay. | | |
| Conglomerate belt on. | 184 | ix | Notes and photos. | 44-46 B | xv |
| Gold mining on, 1897. | 123 | vii | sand. | | |
| 1901. | 247 | xi | Canadian production. | 1886-87, 243 | R C |
| 1902. | 92 | xii | Mouldy Bros. | | |
| <i>See also</i> Manitou lake. | | | Brick-yard of, Kingston, notes. | 64, 65 B | xv |
| Nomenclature of. | 87 | vi | clay for, analysis. | 17 B | xv |
| gold claim, MOSHER BAY, MANITOU STRAITS, R. R. D. | | | Mouffe—? | | |
| Rocks of. | 57 | iv | Views of, on origin of diamonds. | 93 A | xiv |
| pt., STEEP-ROCK LAKE, R. R. D. | | | Moulton tp., HALDIMAND CO. | | |
| Iron prospecting at and near. | 306, 307 | xii | Artesian wells in. <i>See</i> Dunnville. | | |
| Mosquitoes. | | | Natural gas in. | 91 A | xiv |
| Abitibi dist., notes by Jarvis. | 127 A | xiii | | 23 A | xv |
| Abitibi river. | 190 | viii | <i>See also</i> Attercliffe field. | | |
| Forest fires caused by. | 311 | R C | Mound-builders. | | |
| Kajagogamog lake. | 118 | vii | Arrow-heads made by, from rocks. | 83 | i |
| Kenora. | 170 | v | Mount Bischoff tin mine, TASMANIA. | 45 | i |
| Lake Superior, N. shore. | 147 | viii | Desert island, HANCOCK CO., ME. | | |
| Mackenzie creek, Little Wabigoon lake. | 54 | v | Pyroxene and feldspar at. | 438 | R C |
| Michipicoten mining div. | 171 | ii | Healy, ONEIDA TP., HALDIMAND CO. | | |
| Mississagi River dist. | 100 | viii | Gypsum at. | 122 | R C |
| Rainy Lake dist. | 172 | xii | mine. | 242 | i |
| Moss, Lee J. | 97 | iv | | 52 B | xiii |
| Moss. <i>See</i> Sphagnum. | 75 | ix | idle, 1892. | 253 | ii |
| agate | | | 1893. | 199 | iii |
| Definition of. | 538 | R C | selenite. | 208 | ix |
| litter or Peat meal. | | | Section of strata near. | 52 B | xiii |
| Definition of. | 211 | i | Hope, U. S. <i>See</i> Mounthope. | | |
| Experiments on, by Jardine. | 23 | vii | McKay Brick and Tile Co. | | |
| Europe. | 34 A | xiii | Capital and date of charter. | 24 A | xiii |
| Holland, price. | 197 | ii | nickel mine, BLEZARD TP. | | |
| notes by Copenhagen Milk Co. | 211, 212 | ii | Notes on. | 254 | xii |
| Manufacture of, notes by Blue. | 33, 34 | iv | | 55 C | xiv |
| New Brunswick, utilization of. | 199 | ii | Rocks of. | 294 | xii |
| Paper on, by Gibson. | 184-192 | vi | | 56, 81 C | xiv |
| Jack. | 139-144 | iii | Smelting ores of, novel attempt at. | 144 C | xiv |
| Uses of. | 121 | iv | Stockwork at. | 19 C | xiv |
| and value. | 34 A | xiii | Pelee, MARTINIQUE. | | |
| reindeer | | | Disaster at, caused by gas. | 93 A | xiv |
| Abitibi dist. | 218 A | xiv | Royal Manitou Mfg. Co. | | |
| tp., TH. B. D. | | | Capital and date of charter. | 10 | ix |
| Examined by Coleman, 1895. | 3, 4 | v | Savage, ALLEGANY CO., IND. | | |
| Explorations in, notes by Blue. | 119-121 | v | Paving clay from, analysis. | 120 | iii |
| Gold in, discovery. | 25 | R C | Thomas, MADRAS, E. INDIA. | | |
| evidence by Keefer. | 62 | R C | Charnokite at. | 134 A | xv |
| <i>See also</i> Huronian g.m. | | | Mountain, The, BLUE MTS | | |
| Iron ore in. | 22, 145 | R C | Notes on, by Coleman. | 122 | viii |
| Map of. | 122 | v | The, HAMILTON. | | |
| Nagygite in. | 205 | ix | Kaolin beneath. | 78, 86 | R C |
| | | | Stratified deposits at base of. | 228 A | xiii |

| | Page. | Vol. | | Page. | Vol. |
|--|-----------|--------|---|----------|--------|
| Mountain Ash river, L. SUPERIOR, ALG. | | | Mud lake, ANZHEKUMMING LAKE, R. R. D. See Kabagukshi lake. | | |
| Minor ref. to..... | 285 | A xiv | lake, CAMDEN TP., LENNOX CO. | | |
| Rocks near mouth of..... | 318 | A xiv | Contact, Laurentian-Silurian on..... | 27 | B xiii |
| chute, MADAWASKA RIVER. | | | lake, LOUGHBOROUGH TP., FRONTENAC CO. | | |
| Waterpower of..... | 27, 293 | xi | Mica prospecting on..... | 85 | A xiv |
| cork. | 133 | xii | lake, SOUTH CROSBY TP., LEEDS CO. | | |
| Definition of..... | 538 | R C | Iron ore on..... | 34 | ii |
| Grove, OLDEN TP., FRONTENAC CO. | | | magnetite..... | 346 | R C |
| Pyrrhotite in..... | 200 | A xvi | titaniferous..... | 141 | xi |
| iron mine, LAKE TP., HASTINGS CO. | 133 | R C | lake, TEMPLETON TP., QUE. | | |
| lake, GREY CO. | | | Apatite on, in banded vein..... | 440 | R C |
| Terrace on..... | 176 | ix | lake, TEMISKAMING DIST., NIP. | | |
| lake, N. E. OF MANITOU LAKE, R. R. D. | | | Conglomerate on..... | 46 | B xiv |
| Rocks on: gold on..... | 86 | vi | lake, WEST OF ALGOMA, TH. B. D. | | |
| lake, PETERBORO CO. | | | Brulé patches on..... | 296 | A xiv |
| Corundum on. See Bennet's corundum mine. | | | Canoeing on, difficult..... | 287, 292 | A xiv |
| Swamp near..... | 208 | viii | Minor ref. to..... | 285 | A xiv |
| lake, PRINCE EDWARD CO. See Lake on the Mountain. | | | lake, YONGE TP., LEEDS CO. | | |
| lake, STEEL RIVER, L. SUPERIOR. | | | Marl in..... | 121 | A xiv |
| Photo of falls at..... | 112, 113 | ix | Mud Turtle lake, VICTORIA CO. | | |
| leather \| VARIETY OF ASBESTUS C. | | | Trenton limestone on..... | 113 | B xiii |
| O'Connor tp..... | 205 | ix | Mudge, G. D. | | |
| Mining Co. | | | Copper prospecting by, Otter cove..... | 134 | viii |
| Capital and date of charter..... | 9 | viii | Iron prospecting by, near Peninsula..... | 135 | viii |
| portage, S. BRANCH OF BLANCHE RIVER, NIP. | | | Sulphur mining by, near Schreiber..... | 133 | vii |
| Description of, by Miller..... | 225, 226 | xi | | 89 | x |
| Limestone on..... | 32 | B xiv | bay, MANITOULIN ISLAND, L. HURON. | | |
| portage, POKAY LAKE, ALG. | 140 | viii | Clinton formation on..... | 78 | B xiii |
| | 228 | A xiv | copper mine. See Tip-top mine. | | |
| quarry, MOUNTAIN TP., DUNDAS CO. | | | Mudgeamanitou lake, MANITOULIN ISLAND, L. HURON. | | |
| Limestone of, Cambro-Silurian description..... | 47 | B xiii | Niagara formation at..... | 78 | B xiii |
| quarry, THOROLD TP., WLL. LAND CO. | 40 | B xiii | Muggley, Henry H. | | |
| Notes on..... | 96 | i | Cobalt reduction works projected by..... | 12 | A xvi |
| | 119, 120 | B xiii | Mukwa claim, NET LAKE, NIP. | | |
| river, DOG RIVER, L. SUPERIOR. | | | Copper-nickel ore in..... | 173 | ix |
| Drainage area of..... | 285 | A xiv | Muld—? | | |
| tp., DUNDAS CO. | | | Analysis by, of peat..... | 166 | vi |
| Calcareous formation in..... | 46 | B xiii | Muldoon, Jonathan..... | 203 | xi |
| quarried..... | 40 | B xiii | Mullets corners, NEAR MADOC, HASTINGS CO. | | |
| Mounthope, FAYETTE CO., W. VA. | | | Pyrites at..... | 163 | A xvi |
| Iron ore at..... | 348 | R C | Mulligan, H. | | |
| Mousseau, Antonie..... | 56, 57 | xi | Brick-making by, Ottawa..... | 60 | B xv |
| Mowat, J. A. Sir Oliver | 104 | viii | J. G..... | 54 | A xvi |
| Transmittal letters to, 1900..... | 3 | x | Mulmur tp., DUFFERIN CO. | | |
| | 1901..... | 1 | Boring in, for coal..... | 43, 45 | A xiii |
| Moxham, A. J. | | | Cambro-Silurian in..... | 39 | B xiii |
| Estimate by, re iron production, Pittsburg..... | 63 | x | Niagara formation in..... | 49, 120 | B xiii |
| Notes by, on iron-making in Canada..... | 33, 34 | x | Muloch, W. Redford..... | 55 | viii |
| MR 4-24 iron loc., BOSTON TP., NIP. | | | Sir William | | |
| Notes on, by Miller..... | 263-267 | A xiv | Iron prospecting by, near Timagami..... | 88 | A xv |
| Muchimanitounek bay, KESAGAMI LAKE, NIP. | 148 | A xiii | Multonborough, CARROLL CO., N. H. | | |
| Muckle, William..... | 126 | i | Nepheline-syenite from..... | 209 | xi |
| Muckwabi, NIPISSENG TP., P. S. D. | | | Muncie, DELAWARE CO., IND. | | |
| Limestone on..... | 94 | B xiii | Natural gas in, depth and pressure..... | 155 | i |
| | | | Munktell's mechanical works, ESKILSTUNA, SWEDEN..... | 199 | xii |
| | | | Munro, Henry | | |
| | | | Notes by, Lily of the Valley mine..... | 241 | ii |

| | Page. | Vol. |
|--|---------------|--------|
| Munro, John M. | | |
| Gold mining by, near Dryden, . . . | 77 | vii |
| | 42, 73 | viii |
| See also Golden Whale mine. | | |
| Munroe, R. and Son | 120 | ii |
| Munsell, Eugene & Co. | | |
| Mica works of, Ottawa | 291 | xi |
| | 131 | xii |
| | 86 A | xiv |
| | 105 A | xv |
| | 91 A | xvi |
| Munslow mica mine, N. BURGESS | | |
| TP., LANARK CO. | | |
| Notes on, 1901 | 289, 290 | xi |
| Murchison, Sir Robert | | |
| Silurian system named by | 40 | R C |
| Views of, re origin of iron ores . . . | 52 | ii |
| <i>Murchisonia desiderata</i> , Kwataboahegan river | 187 | A xiii |
| Murdoch, James | 39, 41 | A xiii |
| Murdock, William | | |
| Evidence by, before R. C. re:— | | |
| customs mills | 427 | R C |
| free trade | 240 | R C |
| gold, L. of the Woods | 64 | R C |
| iron, Loon lake | 144 | R C |
| ref. to | 65 | ii |
| mining laws | 427 | R C |
| natural gas, Silver islet | 153 | R C |
| silver, Edwards island | 202 | R C |
| Surveying by, near Jackfish | 266 | vi |
| Muriatic acid , Iron pyrites for making | 256 | v |
| Murillo silver mine, OLIVER TP. , Th. B. D. | | |
| Idle, 1891 | 239 | ii |
| Notes on, 1890 | 226 | i |
| station, OLIVER TP., Th. B. D. | | |
| Magnetite near | 299 | xii |
| Murphy, J. | 143 | x |
| J. E. | 108 | ix |
| | 154 | A xiv |
| John | | |
| Limestone quarry of, Brockville . . | 72, 73 | B xiii |
| tp., ALG. | | |
| Soil in, notes on | 133 | A xiii |
| Timber in | 219, 220 | A xiv |
| Murray, Alexander | | |
| Biography of, by Bell | 218-222 | i |
| Map by, Huronian areas, ref. to . . | 122, 157, 158 | vii |
| | 182, 203 | ix |
| York Branch river | 219 | viii |
| Nickel—discovered by, Sudbury dist. | 243, 286 | xii |
| | 3, 134 | C xiv |
| Notes by, on:— | | |
| iron ore, Bastard tp. | 319 | R C |
| L. Nipissing | 87, 88 | i |
| Rideau canal | 35 | ii |
| limestone, Panache lake | 82, 83 | i |
| | 29 | B xiii |
| Wanapiteilake | 83 | B xiii |
| nickel deposits of Sudbury | 88, 89 | i |
| Nipissing dist. | 83 | B xiii |

Murray, Alexander—Con. References to surveys in:—

| | Page. | Vol. |
|--|---------------|--------|
| Bruce Mines dist. | 17 | R C |
| Goulais Bay region | 157 | viii |
| Great Lakes, The | 70 | i |
| Hastings dist. | 244 | viii |
| Lacloche mtns. | 63 | ii |
| Manitoulin island | 75 | B xii |
| Mississagi river | 39 | iii |
| | 148 | viii |
| | 169, 170 | xii |
| Nipissing dist. | 68, 72, 82 | i |
| Nipissing lake | 63 | ii |
| Parry Sound dist. | 92 | B xiii |
| Sudbury dist. | 171 | i |
| | 137 | vii |
| Report by, on iron ores of Hast- ings dist. | 36-39 | ii |
| Thickness of Huronian N. of L. Huron given by | 195 | v |
| Anthony | 218, 222 | i |
| Hewson | | |
| Evidence by, before R. C. | 85 | R C |
| President, Toronto Pressed Brick Co | 103 | i |
| Huson T. | 138 | x |
| | 73 | xi |
| L. | 143 | x |
| Sir John See Murray and Renard. | | |
| N. H. | 143 | x |
| Sir Patrick | 218, 222 | i |
| Reginald A. F. | 165 | iii |
| Robert | | |
| Manager, Ely iron mine | 71 | xi |
| Mining by, Michipicoten div | 139 | x |
| | 47 | xii |
| | 320 | A xiv |
| T. H. | 147 | ix |
| | 143 | x |
| Thomas | | |
| Sandstone quarrying by, near Inglewood | 110 | ix |
| W. P. | 117 | ix |
| | 143 | x |
| | 74 | xi |
| and Renard. | | |
| Notes by, on origin of glauconite . . | 165 | A xv |
| Bay, CHARLEVOIX CO., QUE. | | |
| Marine deposits at | 216 | x |
| gold mine, MARMORA TP., HASTINGS CO. | 197 | xi |
| nickel mine, McKIM TP., NIP. Accidents at | 167, 176 | iii |
| | 201, 214 | iv |
| Boring in, with Govt. drill | 83 | x |
| Deposits of, connected with Elsie deposits | 20 | C xiv |
| Discovery and nomenclature | 88, 89 | i |
| | 235, 284, 286 | xii |
| | 3, 134 | C xiv |
| Geology and plans of | 251-254 | xii |
| Hypersthene of | 18 | C xiv |
| Iron in, ilmenite | 281 | xii |
| | 162 | C xiv |
| marcasite | 281 | xii |
| pyrites | 158 | C xiv |

| | Page. | Vol. | | Page. | Vol. |
|--|----------|--------|--|---------------|-----------|
| Murray nickel mine. — <i>Con.</i> | | | Muskeg AND Swamp. | | |
| Matte from, analysis and character | 283 | xii | Abitibi dist. | 105-113 | A xiii |
| | 152 | c xiv | | 196-205 | A xiv |
| Notes on, 1891 | 231 | i | | 125, 126 | A xv |
| 1892 | 246 | ii | Black river | 185-187 | xii |
| 1893 | 186-189 | iii | Gypsum mt. | 158 | A xiii |
| 1894 | 247, 248 | iv | percentage | 219-235 | A xiv |
| 1895 (idle) | 273 | v | Albany River dist. | 111 | iv |
| 1898 | 93 | vii | Blanche River dist. | 177-183 | xii |
| Ores of, notes by Stelzner | 278, 279 | xii | Cumberland tp. | 108 | B xiii |
| | 17 | c xiv | Grande Presqu'île, L. of the | | |
| percentage of nickel and copper in | 90 | i | Woods | 120 | vii |
| | 153 | c xiv | James bay, south of | 190-193 | viii |
| percentage of gold and silver in | 153 | c xiv | Kenogami valley | 112 | iv |
| Production of | 156 | c xiv | Kwataboahogan river | 137, 146 | A xiii |
| Railway to | 136 | c xiv | Larder Lake dist. | 203 | A xvi |
| Rocks in and near:— | | | Mattagami valley. 120-124, 131, 141-145 | 188-191, 194 | A xiv |
| diabase | 297 | xii | | 9 | Bull. iii |
| analysis | 126 | c xiv | Michipicoten div. | 137 | viii |
| dikes | 85 | c xiv | Mississagi River dist. | 172 | xii |
| with nickel oxide | 298 | xii | Montreal River basin | 173 | vi |
| granite. 9, 14, 57, 58, 81, 83 | 83 | c xiv | Muskego river, Alg. | 134 | ix |
| photo | 51 | c xiv | Nipigon Lake region | 212 | x |
| malchite masses | 76 | c xiv | | 110, 126, 137 | A xvi |
| nickel-bearing | 11 | c xiv | Photo of, typical | 218 | A xiv |
| norite | 293 | xii | Rainy Lake dist. | 165 | v |
| | 214 | A xiii | Sabawee lake, near | 73 | v |
| | 114 | c xiv | Savanne and vicinity | 74 | v |
| analysis | 120 | c xiv | Soweska river | 146 | A xiii |
| cut by granite | 124 | c xiv | Speight's meridian line, E. of L. | | |
| petrography | 108-111 | c xiv | Superior | 199, 201, 202 | viii |
| notes by Bell | 433, 434 | rc | Steep-rock lake, near | 146 | xi |
| Coleman | 52-55 | c xiv | Sudbury dist. | 37, 73 | c xiv |
| section | 204, 208 | A xiii | Vermilion river | 202 | A xiii |
| Section of | 53 | c xiv | Muskego (Muskegogama) lake AND river, N. E. OF BISCOTASING LAKE, ALG. | | |
| from, to Windy lake. With ref to | 8 | c xiv | Beach on, altitude | 103 | c xiv |
| Sulphides of, notes by Walker | 280 | xii | Description of, by Kerr | 122 | A xv |
| percentage of | 151 | c xiv | Minor ref. to | 185 | x |
| Worked by Sir H. Vivian | 177 | c xiv | Notes on, by Parks | 126 | ix |
| notes | 141, 142 | c xiv | Soil near, agricultural | 121 | A xv |
| quarry, NEAR L'ORIGINAL, PRESCOTT CO. | | | sand and gravel | 210, 211 | x |
| Black River limestone in | 98 | B xiii | Trees on and near | 143, 144 | A xv |
| Murraysville, WESTMORELAND CO., PA. | | | river, N.E. OF PISHKANOGAMA LAKE, ALG. | | |
| Natural gas at | 148 | i | Peat bogs on | 134 | ix |
| Muscovite (WHITE MICA). | | | Muskegogema. See Muskego. | | |
| Analysis of | 83 | A xiv | Muskoka Beaver Mg. Co. | | |
| Composition and description of | 226 | vi | Capital and date of charter | 9 | viii |
| Determination of | 227 | vi | dist. | | |
| Occurrences of. <i>See Mica.</i> | | | Limestone in, notes by Miller | 81 | B xiii |
| Museums. | | | Gold Mg. and Development Co. | | |
| New South Wales, establishment of | 289 | RC | Capital and date of charter | 9 | viii |
| Uses of | 411, 412 | RC | river, MUSKOKA DIST. | | |
| Musket, David | | | Allanite on. <i>See Hollow lake.</i> | | |
| Calculation by, <i>re</i> Heath's cast-steel process | 363 | RC | "Blotched" diorite on | 94 | B xiii |
| Robert F. | | | Waterpower on | 252 | vii |
| Process of, for steel-making | 364, 367 | RC | | 14 | A xv |
| ref. to | xxi | RC | Muskrat. | | |
| Muskalunga lake, S. OF LAKE SEPL, R. R. D. | | | Abitibi dist. | 193 | viii |
| Gold on, trace | 62 | v | | 127, 189 | A xiii |
| | | | | 242 | A xiv |
| | | | Mattagami valley | 131 | A xv |
| | | | lake, MICHIPICOTEN DIV., ALG. | | |
| | | | Description of | 293 | A xiv |
| | | | Minor ref. to | 285 | A xiv |

| | Page. | Vol. | | Page | Vol. |
|---|----------|--------|---|---------------|--------|
| Muskrat lake, MUSKRAT RIVER, OTTAWA RIVER. | | | Nairn tp., ALG. | | |
| Trenton formation on..... | 104 | B xiii | Nickel ore in, assay of..... | 145 | C xiv |
| Musquash, St. John co., N. B. | | | Rocks in, clay-slates..... | 73 | i |
| Moss litter made at..... | 199 | ii | gabbro..... | 75 | C xiv |
| | 191 | vi | hydro-mica schists..... | 81 | i |
| Moss Litter Co. | | | Namainse. See Mamainse. | | |
| Operations of..... | 199 | ii | Namakan river, R. R. D. | | |
| Musquataysee river. See Turtle river, Turtle lake. | | | Explorations in region of, notes by Blue..... | 136-140 | v |
| Mutton, S. S. | | | Namannitigong river, L. NIPISSING, P. S. D. | | |
| Evidence by, before R. C..... | 86 | R C | Limestone near..... | 94 | B xiii |
| Mutual Natural Gas Co. | | | Nan Ki Poo gold mine, SHOAL LAKE, L. OF THE WOODS. | 50 | vii |
| Capital and date of charter..... | 9 | xii | Gold Mfg. Co. | | |
| Notes on, 1890..... | 131 | i | Capital and date of charter..... | 11 | vii |
| Operating, 1904..... | 91 | A xiv | Nancy Helen Mines, Ltd. | | |
| 1906..... | 24 | A xvi | Capital and date of charter..... | 30 | A xvi |
| Wells of, number..... | 44 | xi | Nantyglo, MONMOUTHSHIRE, ENGLAND. | 36 | i |
| Mya. | | | Napanee, RICHMOND TP., LENNOX CO. | | |
| Abitibi river..... | 189 | viii | Altitude of..... | 222 | x |
| " <i>arenaria</i> | | | Brick-yard at, notes on..... | 77 | B xv |
| James bay..... | 143 | A xiii | Cement at..... | 177 | i |
| Saxicava sand..... | 32 | B xv | tests on..... | 77 | R C |
| " <i>truncata</i> | | | works..... | 109 | i |
| Missinaibi river..... | 162 | A xiii | | 136 | A xiv |
| Saxicava sand..... | 32 | B xv | <i>See also</i> Rathbun Co. | | |
| Myers, Alexander | | | Limestone at and near:— | | |
| Quarrying by, Caledon tp..... | 99 | i | analysis..... | 28 | B xiii |
| J. | 104 | viii | Black River formation..... | 27 | B xiii |
| M. A. | 98 | x | for building..... | 85 | R C |
| | 237 | xi | quarry..... | 28 | B xiii |
| | 91, 96 | xii | notes by Rathbun..... | 84, 85 | R C |
| | 72 | A xiii | Stratified deposits near..... | 241 | A xiii |
| Cave, BARRIE TP., FRONTENAC CO. | | | Napawquazi lake, MATTAGAMI RIVER, ALG. | | |
| Gold mining near. <i>See</i> Star of the East mine. | | | Terraces on..... | 181 | x |
| Rocks at and near..... | 202 | xi | Napkins. | | |
| Silver at, reported..... | 220 | v | Made of hornblende..... | 95, 96 | iii |
| Myles, P. | 104 | viii | Naptha. | | |
| <i>Myrica asplenifolia.</i> | | | As a by-product of petroleum... .. | 158, 162, 163 | R C |
| Abitibi Lake dist..... | 241 | A xiv | Romney tp..... | 96 | A xvi |
| Mattagami valley..... | 150 | A xv | Definition of..... | 538 | R C |
| Myrick, E. B. | 66 | xii | From peat..... | 210 | i |
| <i>Myriophyllum verticillaris.</i> | | | Napthalene. | | |
| Mattagami valley..... | 150 | A xv | Composition of..... | 33 | v |
| Myrtle, WHITBY TP., ONTARIO CO. | | | Narrow bay (Baie Fine), GEORGIAN BAY, L. HURON. | | |
| Stratified deposits at, altitude.... | 223 | x | Copper ore on..... | 91 | i |
| <i>Mytilarca.</i> | | | lake, MICHIGICOTES DIV., ALG. | | |
| Kwataboahagan river..... | 188 | A xiii | Rocks on and near..... | 113 | A xiii |
| <i>Mytilus edulis.</i> | | | | 314, 338 | A xiv |
| Finch..... | 217 | x | Iron formation..... | 326 | A xiv |
| Nepean tp..... | 216, 224 | x | lake, NEAR PIPESTONE LAKE, R. R. D. | | |
| Nabopolasser, KING OF BABYLON. | 166 | i | Keewatin on..... | 61 | iv |
| Nacozari, MEXICO | 228, 229 | xii | Narwhal. | | |
| Nagyagjte. | | | Hudson bay and strait..... | 133 | iv |
| Huronian mine, Moss tp..... | 106 | v | Nasbonsing. See Astorville. | | |
| | 205 | ix | Nasi, Gusta | 39, 41 | A xiii |
| Nail and tack factories. | | | Nasmith, G. G. | | |
| Statistics, 1881..... | 116 | ii | Analysis by, of tinguaita..... | 189 | ix |
| Nails. | | | Nasmyth, James | | |
| Canadian imports, 1881-87... .. | 247, 252 | R C | Steam hammer of, ref. to... .. | xxi, 366 | R C |
| from U.S., 1887..... | 468 | R C | | | |
| Nairn Centre (late Nelsonville), NAIRN TP., ALG. | | | | | |
| Gabbro near..... | 78 | C xiv | | | |
| Pyrrhotite near..... | 145 | C xiv | | | |

| | Page. | Vol. | | Page. | Vol. |
|---|------------|------|---------------------------------------|----------------|------|
| Nassagawega tp., HALTON CO. | | | Natrolite. | | |
| Brick clay at <i>See</i> Campbellville. | | | L. Superior amygdaloids | 205 | ix |
| Lime from, analysis..... | 59 B | xiii | Nattress, Rev. Thomas | | |
| Limestone in, dolomite..... | 58 B | xiii | Notes by, on limestones of Essex | | |
| fossiliferous..... | 57 B | xiii | co..... | 41, 42 B | xiii |
| quarry. <i>See</i> Kelso. | | | Paper by, on Corniferous ex- | | |
| Ochre in | 205 | ix | posure in Anderdon tp.... | 123-127 | xi |
| <i>Nasturtium officinale.</i> | | | refs. to | 7 | xi |
| Abitibi Lake dist..... | 241 A | xiv | | 153 | xii |
| Mattagami valley | 150 A | xv | Natural cement. | | |
| " <i>palustre.</i> | | | Limestone in manufacture of, | | |
| Mattagami valley | 151 A | xv | analyses..... | 15, 16 B | xiii |
| Natal, S. AFRICA. | | | Mortar from, compared with that | | |
| Mineral lands in, ownership.... | 43 | i | from Portland cement | 163 A | xiv |
| <i>Natica affinis.</i> | | | Notes on, by Gillespie..... | 162-166 A | xiv |
| Ottawa | 224 | x | Miller..... | 15, 16 B | xiii |
| " <i>clausa.</i> | | | Occurrences of. <i>See</i> Cement. | | |
| James bay..... | 143 A | xiii | gas. | | |
| Nation (or Petite Nation) river, | | | As substitute for coal..... | 391 | R C |
| PRESCOTT CO. | | | | 196 | ii |
| Cambro-Silurian limestones on. | 40, 47 B | xiii | Association of, with oil..... | 26 | iv |
| quarrying on..... | 99 B | xiii | Distribution of..... | 178 | i |
| Trenton | 98 | xi | Economic value of..... | 157-160 | i |
| Gravel deposits near | 218 | x | for glass-making | 159 | i |
| National Cobalt Silver Mg. Co. | | | lime-burning | 126 | i |
| Capital and date of charter | 30 A | xvi | Evidence <i>re</i> , before R. C..... | 151-153 | R C |
| copper mine, ONTONAGAN | | | Exhaustion of, certain..... | 158 | i |
| REGION, U.S..... | 85 | iii | Export of, law against..... | 21 | x |
| Corundum Wheel Co. | | | notes by Stiff | 42, 43 | xi |
| Corundum prospecting by, Mont- | | | From peat..... | 230 | xii |
| eagle tp..... | 99 A | xv | plant for making, cost..... | 231 | xii |
| gold mine, THREE HUNDRED | | | diagrams... .. | 109 | xi |
| LAKE, MANITOU DIST., R.R.D. | 92 | xii | From sawdust | 393 | R C |
| | 69 A | xiii | Industry of, 1895..... | 28 | v |
| Iron and Nickel Corp'n. | | | 1899..... | 105, 106 | ix |
| Capital and date of charter | 37 A | xiii | Moisture in, method of elimin- | | |
| iron mine, GLAMORGAN TP., | | | ating | 106 | ix |
| HALBURTON CO..... | 132 | R C | Mount Pelee disaster caused by.. | 93 A | xiv |
| Mica Grinding Co. | | | Origin of | 152 | R C |
| Work by, 1901..... | 292 | xi | | 164 | vi |
| suspended, 1902..... | 132 | xii | | 91-95 A | xiv |
| Mines Investment Co. | | | various views | 140-152 | i |
| Capital and date of charter | 10 | ix | Paper on, by Blue | 115-164 | i |
| Mg. and Development Co. | | | Stiff... .. | 41-45 | xii |
| Capital and date of charter | 30 A | xvi | Quebec prov., Montreal reg.... | 196 | ii |
| Oil Co. | | | notes by Hunt..... | 126 | i |
| Work by, 1895, notes on..... | 26, 27 | v | Rates for, to consumers..... | | |
| Oil Works. | | | 120, 130, 131, 134, 135 | | i |
| Operating, 1907 | 17 | vii | Report on, by Corkill..... | 88-117 A | xiv |
| Petroleum Co. | | | Coste | 108-115 A | xv |
| Capital and date of charter | 9 | xii | Rock pressure of..... | 96 A | xiv |
| Portland Cement Co. | | | Salt water in, paper on | 152-154 | i |
| Analysis of clay and marl used | | | Statistics of, 1892..... | 10, 11 | ii |
| by | 183 A | xiv | 1893..... | 9, 10 | iii |
| Notes on, 1901 | 33 | xi | 1894..... | 11 | iv |
| 1902..... | 31, 32, 35 | xii | 1895..... | 11, 28 | v |
| 1905..... | 149-152 A | xiv | 1896..... | 13, 24 | vi |
| Operating, 1903..... | 17 A | xiii | 1897..... | 15, 19 | vii |
| 1905..... | 17 A | xv | 1898..... | 11, 14, 17 | viii |
| 1906..... | 20 A | xvi | 1899..... | 11, 12, 17 | ix |
| Plant of, notes..... | 18 B | xiii | 1900..... | 11, 12, 18 | x |
| photos..... | 150-153 A | xiv | 1901..... | 13 | xi |
| | 114 B | xv | 1902..... | 12, 13, 38, 39 | xii |
| Tube Works, NEAR PITTSBURG, | | | 1903..... | 3, 4, 22 A | xiii |
| U.S. | | | 1904..... | 1, 3, 21 A | xiv |
| Labour employed by, statistics.. | 370 | R C | 1905..... | 1, 23, 108 A | xv |
| Output of, 1893 | 119 | ii | 1906..... | 4, 6, 24, 25 A | xvi |
| Native 7 Silver Mg. Co. | | | Taxation of companies selling... | 41 | xi |
| Capital and date of charter | 11 | vii | | | |

| | Page. | Vol. |
|--|------------------|--------|
| Natural gas. — <i>Con.</i> | | |
| United States..... | 151, 152 | R C |
| Indiana, compared to Kent co. | 99 | A xvi |
| Ohio..... | 115-117, 120-122 | i |
| production, 1888..... | 525 | R C |
| Wasting of, act to prevent.. | 163, 164 | i |
| <hr/> | | |
| Brant co., Brantford (near)..... | 25 | A xiii |
| Bruce co., Amabel tp..... | 21 | x |
| Hepworth, logs..... | 45 | xi |
| Bubbling Water, Missinaibi river. | 128 | iv |
| Carleton co., Gloucester tp..... | 58 | xi |
| Copper Cliff mine..... | 260 | xii |
| Essex co., Clinton formation.... | 4 | i |
| Gosfield S. tp..... | 42 | R C |
| Mersea tp..... | 26 | A xiii |
| Leamington..... | 25, 27 | vii |
| notes, 1900..... | 19, 20 | x |
| by Stiff..... | 42 | xi |
| occurrences..... | 115 | i |
| Haldimand co..... | 4 | i |
| Caledonia..... | 252 | iv |
| notes by Walker..... | 283 | v |
| notes by Walker..... | 281 | vi |
| Kent co., compared to that in | | |
| Ohio..... | 99 | A xvi |
| in drift..... | 123 | i |
| map showing wells..... | 93 | A xvi |
| in drift..... | 123 | i |
| report by Knight..... | 92-104 | A xvi |
| ref. to..... | 21 | A xvi |
| Romney and Tilbury tps..... | 25 | A xvi |
| Manitoulin island..... | 140 | i |
| Niagara pen..... | 128 | i |
| Port Arthur silver mines..... | 54, 58 | B xiv |
| Silver Islet mine..... | 35, 153 | R C |
| Welland co..... | 4 | i |
| analysis..... | 106 | ix |
| notes, 1900..... | 20, 21 | x |
| by Stiff..... | 41 | xi |
| Port Colborne..... | 35 | xi |
| York co., Toronto, near..... | 4, 138 | i |
| and Oil Co. | | |
| Amount paid by, to Treasury, | | |
| 1900..... | 18 | x |
| Merged with United Gas & Oil | | |
| Co..... | 19 | x |
| Notes on, by Blue..... | 28, 29 | v |
| <i>See also</i> Ontario Natural Gas | | |
| Co. | | |
| Naughton, GRAHAM TP., ALG. | | |
| Farm land near..... | 106 | C xiv |
| Nickel found near, 1856..... | 235 | xii |
| Quartz mined near, for flux..... | 61 | A xvi |
| Nautilus. | | |
| St. Marys, near..... | 96 | B xiii |
| " (Ohioensis)..... | | |
| St. Marys, near..... | 152 | xii |
| Naxos island, THE CYCLADES, ÆGEAN | | |
| SEA. | | |
| Emery on..... | 533 | R C |
| Naylor, E. | | |
| Brick-yard of, Sterling..... | 69 | B xv |
| J. L..... | 41 | A xiv |
| Navarino, Battle of | 218 | i |
| Navigation. | | |
| Hudson bay and straits..... | 131, 132 | iv |

| | Page. | Vol. |
|--|---------------|--------|
| Navy, The British | | |
| Nickel-steel for. <i>See</i> British Ad- | | |
| miralty. | | |
| Neal, Thomas | 43, 48 | xii |
| Bros. | | |
| Iron and steel output of, 1893... | 118 | ii |
| Near, Edward B. | | |
| Gas well of, notes on..... | 130 | i |
| Neary, A. | 49 | A xiii |
| Nease, McLain and McGinnis | 119 | ii |
| Nebuchadnezzar, King | 166 | i |
| Neebing tp., TH. B. D. | | |
| Course of silver veins in..... | 33 | R C |
| Marcasite in..... | 203 | ix |
| Neebish gold mine, MOSS TP., TH. | | |
| B. D. | | |
| Evidence <i>re</i> , before R. C..... | 62 | R C |
| Notes on, by Plummer..... | 78 | v |
| Mining Co. | | |
| Capital and date of charter..... | 11 | vii |
| Needle pt., L. OF THE WOODS, R. R. D. | 173 | v |
| Needles. | | |
| Canadian imports of, 1881-87.... | 252 | R C |
| Prices of, per ton..... | 351 | R C |
| Neeland rapid, FREDERICK HOUSE | | |
| RIVER, ALG. | | |
| Character of river near..... | 186 | A xiv |
| Rocks at..... | 210 | A xiv |
| mica-schist..... | 198 | A xiv |
| Soil from, analysis..... | 246, 247 | A xiv |
| Timber near..... | 196 | A xiv |
| Neelands, E. V. | | |
| Acknowledgments to..... | 196 | viii |
| Asst. Superintendent, Massey | | |
| Station mine..... | 34 | A xv |
| Petrography of dolomite found by. | 210 | x |
| Work by, 1897..... | 161, 169 | vii |
| Neelon tp., NIP. | | |
| Farm land in..... | 106 | C xiv |
| Gold in..... | 114 | R C |
| Rocks in, greywacke..... | 89 | C xiv |
| Neepawa Gold Mining Co. | | |
| <i>See also</i> Royal Sovereign mine. | | |
| Capital and date of charter..... | 11 | vii |
| Work by, Manitou lakes, 35, 76, | 122 | vii |
| 247..... | | xi |
| Neepawa island, MINNITAKI LAKE, | | |
| R. R. D. | | |
| Gold mining on, 1898..... | 71 | viii |
| Neff, N. C. | 66 | ix |
| Negaunee, MICHIGAN, U. S. | | |
| Iron deposits near, notes by Cole- | | |
| man..... | 150-152 | ix |
| Neil, Robert | 46, 48 | xii |
| lake, FRONTENAC CO..... | 202 | xi |
| Neilson, Alexander | 236 | v |
| James B. | | |
| Hot blast invented by.. | 320, 361, 366 | R C |
| Nejef. <i>See</i> Meshed-Ali. | | |
| Nellany, M. | 98 | x |
| Nelles, John A. | | |
| Manager, Excelsior gypsum mine. | 241 | i |
| ..... | 198 | iii |
| ..... | 251 | iv |
| ..... | 283 | v |
| ..... | 279 | vi |
| ..... | 100 | vii |

| | Page. | Vol. |
|--|--------------|--------|
| New Caledonia. | | |
| Cobalt ores of..... | 103 | A xiii |
| competing with Canadian..... | 72 | B xiv |
| notes by Miller..... | 68-70 | B xiv |
| production, 1896-1900..... | 70 | B xiv |
| 1901..... | 6 | A xiii |
| 1905..... | 73 | B xiv |
| Nickel ores of | | |
| competing with Canadian..... | 135 | ii |
| discovery..... | 161 | ii |
| effect on prices..... | 236 | xii |
| exhibit at World's Fair..... | 388 | R C |
| free from sulphur..... | 191 | iii |
| garnierite..... | 145 | ii |
| description..... | 193 | ii |
| genthite..... | 214 | vi |
| mining, notes..... | 149 | ii |
| photos..... | 148 | C xiv |
| notes by Charleton..... | 373 | R C |
| Glasser..... | 223, 224 | ix |
| paper by Bain..... | 178 | iv |
| production, 1875-1902..... | 147-150 | C xiv |
| 1901..... | 213-216 | ix |
| treatment..... | 157 | C xiv |
| 1901..... | 6 | A xiii |
| treatment..... | 148, 151-153 | ii |
| Peridotites in..... | 154 | C xiv |
| Carlow, CARLOW TP., HASTINGS | | |
| Co. | | |
| Corundum mining and works in..... | 19 | A xv |
| <i>See also</i> Ashland Emery and | | |
| Corundum Co. | | |
| Ontario Corundum Co. | | |
| Waterpower at. <i>See</i> Papineau | | |
| creek. | | |
| Chum gold. <i>See</i> Iron pyrites. | | |
| Cumberland, HANCOCK CO., | | |
| W. VA. | 112 | iii |
| Glasgow, PICTOU CO., N.S. | | |
| Steel making at..... | 402 | R C |
| Iron and Coal Co. | | |
| Bounties to..... | 28 | ii |
| Golden Twins gold mine, | | |
| CLEARWATER LAKE, SEINE | | |
| RIVER DIST. | | |
| Notes on, 1898..... | 92 | viii |
| (OR UPPER) Green lake, S. E. | | |
| ALGOMA | 157, 167 | xii |
| Hampshire, U. S. | | |
| Batholithic gneiss in, pushing | | |
| through mica-schist..... | 159 | vii |
| Mica mining in..... | 91 | A xiii |
| Hebrides. | | |
| Labour from, for New Caledonia..... | 149 | ii |
| Jersey, U. S. | | |
| Clays from, for sewer-pipes..... | 86 | R C |
| Corundum in..... | 241-243 | viii |
| Feldspar from Frontenac co. sent | | |
| to, for pottery..... | 21 | A xvi |
| Geological Survey of, notes by | | |
| Walker..... | 421 | R C |
| Iron ore in, cost of production... | 10 | i |
| origin..... | 52 | ii |
| royalties, 1879..... | 12 | i |
| treatment..... | 89, 102 | ii |
| Marl production, 1888..... | 525 | R C |
| Moraine in..... | 123 | ix |
| Oil in, flash test for..... | 164 | R C |

New Klondike, The

| | |
|--|----------|
| Gold mining in, 1897. 77, 78, 123, 124 | vii |
| 1898... 42, 72-75, 276 | viii |
| 1899..... 63, 64 | ix |
| 1900..... 90 | x |
| 1901..... 256 | xi |
| Map of..... | 79 |
| Liskeard, DYMOND TP., NIP. | |
| Brick-clay at and near..... | 20 |
| analysis..... | 33 |
| photo..... | 26, 27 |
| yards, notes..... | 18, 19 |
| Iron ore near..... | 83, 84 |
| Mining class at..... | 12 |
| 43 | 43 |
| 50, 54 | 50, 54 |
| Liskeard and Northern On- | |
| tario Mining Co. | |
| Capital and date of charter..... | 26 |
| Ontario, The | |
| Paper on, by Blue..... | 191-211 |
| Ontario Cobalt and Silver | |
| Mining Co. | |
| Exhibits of, at Buffalo..... | 25 |
| Work by, Coleman tp..... | 80 |
| Ontario Iron Co. | |
| Capital and date of charter..... | 26 |
| Ontario Mg. and Develop- | |
| ment Co. | |
| Capital and date of charter..... | 11 |
| Ontario Ore Refining Co. | |
| Capital and date of charter..... | 26 |
| Ontario (J B 7 OR TRETHEWEY) | |
| silver mine, COBALT. | |
| Bismuth from, analysis..... | 22 |
| Mining class at, 1906..... | 52 |
| Minor ref. to..... | 15 |
| Notes and photos..... | 74-76 |
| Ore of, value..... | 25 |
| Owner of..... | 5 |
| Producing, 1905..... | 7, 9 |
| 1906..... | 8 |
| Specimens from, assay..... | 17 |
| photo..... | 18 |
| Tetrahedrite in..... | 22 |
| Veins in, strike and photos.... | 27-31 |
| Post (H. B. C.), AZITIBI RIVER, | |
| ALG. | |
| Character of country near..... | 144 |
| Elm (swamp) near..... | 176 |
| Forest fires near..... | 177 |
| Photo of..... | 200, 201 |
| Red deer at..... | 178 |
| Vegetables grown at..... | 186 |
| Post brook. See Blue-water | |
| river. | |
| Red Sandstone. | |
| Definition of..... | 538 |
| <i>See also</i> Permian. | |
| Rockland, MELBOURNE TP., | |
| RICHMOND CO., QUE. | |
| Roofing slate in..... | 87 |
| South Wales, AUSTRALIA. | |
| Arsenic used in, as an insecticide. | |
| 115, 116 | 115, 116 |
| Cobalt ores in..... | 103 |
| 70 | 70 |

| | Page. | Vol. | | Page. | Vol. |
|--|-------------------|------|--|---------------|------|
| New South Wales.—<i>Con.</i> | | | New York state.—<i>Con.</i> | | |
| Mining laws of, notes by R. C. | 289-291 | R C | Natural gas in | 151 | R C |
| royalties in | 23-25, 30, 31, 45 | i | | 146 | i |
| Platinum mining in | 142, 143 | vii | Oil in, flash test for | 164 | R C |
| Prospecting in, with diamond | | | Portage and Chemung formation | | |
| drill | 233 | v | in | 47 | R C |
| | 165 | iii | Shales of, analyses | 120 | iii |
| System Brick Co. | | | Zealand. | | |
| Capital and date of charter | 30 A | xvi | Awaruite in | 151 C | xiv |
| Toronto, TORONTO. | | | Mining classes in | 216 | v |
| Gas in, notes | 138, 139 | i | lands, ownership | 44, 45 | i |
| Woidoma, RUSSIA. | | | system of leasing | 8 | i |
| Peat manufactured at | 218 | ij | laws | 14 | i |
| York, U. S. | | | notes by R. C. | 286-289 | R C |
| Brick pavement in | 109 | iii | schools in | 417 | R C |
| Freight rate from, to Cobalt | 5 A | xiv | description and his- | | |
| Mining schools in | 508 | R C | tory | 513-521 | R C |
| Nickel steel exhibited in, 1853 | 165 C | xiv | notes | 213 | i |
| | | | | 221, 222 | iv |
| York and Canadian Copper Co. | | | scheme of, suggested | | |
| Capital and date of charter | 9 | xii | for Ont. | xxiii | R C |
| Tip-Top mine owned by | 55 A | xiii | utility | 216 | iv |
| <i>See also</i> Tip-Top copper mine. | | | Weed killers in, analysis | 115 | xi |
| York and Canadian Mg. Co. | | | Newark, N. J. | | |
| Capital and date of charter | 28 A | xvi | Reduction works at | 11 A | xvi |
| York and Lake Erie Oil and Gas Co. | | | Newberry, John S. | 156 | vi |
| Capital and date of charter | 37 A | xiii | Prof. T. S. | | |
| York and Ontario Gold Mg. Co. | | | Diagram by, of coal gradations | 164 | vi |
| Capital and date of charter | 9 | xii | Views of, <i>re</i> origin of gas and oil | 142 | i |
| Gold mining by | 239 | xi | | 95 A | xiv |
| York and Ontario Mg. Co. | | | Iroquois | | |
| Mica mining by, Loughboro tp. | 89, 90 A | xvi | beach | 226 A | xiii |
| York and Ontario Oil and Gas Co. | | | Spencer B. | | |
| Capital and date of charter | 28 A | xvi | Hydraulic index of | 124 A | xiv |
| York Central Railroad. | | | Notes by, on rock cement indus- | | |
| Tests by, on peat as fuel | 203 | i | try | 34 | xi |
| York Cobalt Silver Mines. | | | | 16 B | xiii |
| Capital and date of charter | 30 A | xvi | Newboro, S. CROSBY TP., LEEDS CO. | | |
| York iron mine, GLAMORGAN TP., HALIBURTON CO. | | | <i>See also</i> Chaffey mine. | | |
| Iron ore from, cost of working | 388 | R C | Chondrodite at | 196 | ix |
| Notes on, by Pusey | 132 | R C | Iron mining near | 34 | ii |
| York-Lake Erie Oil and Gas Co. | | | Newburgh, CAMDEN TP., ADDINGTON CO. | | |
| Capital and date of charter | 24 A | xiii | Analysis of limestone from | 27 B | xiii |
| York Oil Co. | | | Newcastle, CLARKE TP., DURHAM CO. | | |
| Capital and date of charter | 26 A | xv | Iroquois beach near | 230 A | xiii |
| York state, U. S. | | | Silurian formation near | 24 B | xiii |
| Beaches in | 233, 234, 242 A | xiii | Trenton | 41 | R C |
| Brick pavements in cities of | 108, 109 | iii | Utica | 42 | R C |
| Charcoal in, cost of | 334 | R C | Newell, A. W. | | |
| Corundum in | 241, 242 | viii | Notes by, on the Pepper oil well | 23 | vi |
| Geological Survey of, notes by | | | James | 32, 35 A | xvi |
| Walker | 421 | R C | Newett, Frank | 249 | iv |
| Guelph formation absent in | 120 B | xiii | Newfoundland. | | |
| Iron ores of, method of concen- | | | Cambrian in | 31 | R C |
| tration | 326, 327 | xii | Pyrites deposit in | 200 A | xvi |
| production, 1887 | 468 | R C | Newington, OSNABRUCK TP., STOR- | | |
| cost | 10 | i | MONT CO. | | |
| royalties, 1879 | 12 | i | Gravel near | 218, 219, 227 | x |
| smelting | 325 | R C | Peat bog at, analysis | 203 | xii |
| Medina formation in | 43 | R C | notes | 219, 227 | x |
| Mining laws of, notes by R. C. | 282 | R C | | 208, 223 | xii |
| Moraine in | 123 | ix | | 30 A | xiii |
| | | | photos | 208 | xii |
| | | | Newlands, Lawrence | 264 | vi |
| | | | diamond mine, W. GUAQUA- | | |
| | | | LAND. | 123 | ix |

| | Page. | Vol. |
|--|-----------|-------|
| Newman, W. T. | | |
| Evidence by, before R. C. re:— | | |
| iron, Nipissing dist. | 142 | R C |
| silver, L. Nipissing | 204 | R C |
| (OR GREAT MANITOU) island, L. NIPISSING. | | |
| Length and position of | 84 B | xiii |
| Limestone on | 81 B | xiii |
| Newmarket, WHITECHURCH TP., YORK CO. | | |
| Artesian wells in | 58 | i |
| tp., NIP. | | |
| Clay concretions in | 205 A | xiv |
| Rocks in | 210 A | xiv |
| Soil in | 227 A | xiv |
| muskeg | 187, 196, | 209 A |
| requires drainage | 207 A | xiv |
| Trees in | 227 A | xiv |
| Newnham, Mrs. J. A. | 179 A | xiii |
| Very Rev. J. C. (BISHOP OF MOOSONEE) | | |
| Acknowledgments to | 196 | viii |
| Cathedral and house of, photo. . | 200, | 201 |
| Diocese of, area | 135 | iv |
| Efforts by, to help Indians | 179 A | xiii |
| Grant made to, by Govt. | 134 | iv |
| Minor ref. to | 129 | iv |
| bay, KESAGAMI LAKE, NIP. | | |
| Sand and gravels on | 148 A | xiii |
| Newport island, N. Y. | | |
| Apatite in, associated with py- roxene | 437 | i |
| Newsome, J. E. | 82, | 105 |
| ..... | 87 | x |
| Newton, G. J. | 117 | ix |
| H. M. | 81 | viii |
| John Thompson | 172 | ii |
| Joseph | 24 | viii |
| Newtonville, CLARKE TP., DURIAM CO. | | |
| Iroquois beach near | 239, | 230 A |
| Peat prepared at | 197 | ii |
| Ney, Marshal Michel | 164 | i |
| Niagara and Georgian Bay Mining and Development Co. | | |
| Capital and date of charter | 9 | x |
| Minor ref. to | 32 | ix |
| escarpment. | | |
| Brick-clay in | 101 | i |
| Building-stone in | 95 | i |
| Fossils from | 141-155 | xii |
| Medina shale of, thickness | 177 | i |
| Notes on, by Bell | 44 | R C |
| Falls, MONTROSE TP., WELLAND CO. | | |
| Beach at | 227 A | xiii |
| Boring at, with Calyx drill | 55 | x |
| Brick-yard in, notes on | 104 B | xv |
| Calcite at | 195 | ix |
| Limestone near, dolomite | 194 | ii |
| sulphur in | 210 | ix |
| Natural gas supplied to | 91, | 104 A |
| ..... | 108 A | xv |
| Origin of, date | 196 | v |
| Post office at, building-stone of .. | 96 | i |
| Sphalerite at | 209 | ix |
| Travertine at, crystalline | 91 B | xiii |

| | Page. | Vol. |
|---|-------|-------|
| Niagara Falls, N. Y. | | |
| Calcium carbide manufactured at. | 37 | v |
| ..... | 31 | vi |
| falls, NIAGARA RIVER. | | |
| Age of | 226 | x |
| ..... | 237 A | xiii |
| Niagara formation on | 44 | R C |
| Power from, for calcium carbide. | 161 | iv |
| notes | 38 | v |
| plant, limestone for | 4 B | xiii |
| Falls Acetylene and Gas Ma- chine Co | 20 | viii |
| Falls Co. | | |
| Carborundum made by | 216 | vii |
| ..... | 39 | xi |
| Falls Gas, Fuel and Light Co. | | |
| Notes on, 1890 | 135, | 136 |
| Falls Power Co. | | |
| Nickel steel used by, in plant .. | 190 | iv |
| Notes on | 38 | v |
| formation. | | |
| Albany river, Kee | 31, | 112 B |
| Cement in | 109, | 110 |
| Distribution and character, notes | | |
| by Bell | 43, | 44 |
| Findlay, Ohio | 120 | i |
| Fossils of | 31 B | xiii |
| Gas in, various borings for | 130, | 132, |
| ..... | 136 | i |
| Hudson bay | 85 B | xiii |
| Name of, proposed by Bell | 133 | vi |
| Occurrences | 24 B | xiii |
| Position of, in Silurian | 2 | R C |
| ..... | 133, | 134 |
| Quebec prov., L. Timiskaming .. | 174 | ix |
| photo | 49 B | xiv |
| Racine, Wis. | 92 | v |
| Section of, in oil-fields | 98 A | xiv |
| Thickness of | 24 B | xiii |
| in oil-fields | 98 A | xiv |
| Winnipeg River basin, Kee | 85 B | xiii |
| | | |
| Albany river | 31, | 112 B |
| Bruce co. | 36 B | xiii |
| Cockburn island | 79 B | xiii |
| Dufferin co. | 39 B | xiii |
| Essex co., Comber, in borings .. | 156 | R C |
| Grey co. | 49, | 50 B |
| Haldimand co., Caledonia | 252 | iv |
| Halton co. | 57, | 58 B |
| Lincoln co. | 73 B | xiii |
| Niagara tp. | 163 A | xiv |
| Manitoulin island | 93 | i |
| thickness | 73 A | xv |
| Nipissing dist. | 84, | 86 B |
| Cobalt dist., description | 41 B | xiv |
| Timiskaming lake | 204 | v |
| Haileybury, analysis | 32 B | xiv |
| lithographic stone | 6 B | xiii |
| Peel co. | 95 B | xiii |
| Credit Forks | 79 | R C |
| Simcoe co. | 109, | 110 B |
| Welland co. | 116 B | xiii |
| Welland canal, section | 98 A | xiv |
| Wellington co. | 120 B | xiii |
| Wentworth co. | 123, | 125 B |
| Ancaster, notes by Parks | 141 | xii |
| Western peninsula, extent | 125 B | xiii |

| | Page. | Vol. |
|---|------------|--------|
| Niagara peninsula. | | |
| Gas in, paper by Ashburner on probability of..... | 160-162 | i |
| Synclinal theory applied to oil and gas in..... | 156 | i |
| Peninsula Power and Gas Co. | | |
| Operating in Crowland field.... | 104 | A xiv |
| Quarry Co. | | |
| Capital and date of charter..... | 24 | A xiii |
| river, ONT. AND U. S. | | |
| Beach near..... | 233 | A xiii |
| Bridge over, character of limestone for..... | 14 | A xiii |
| Rocks on..... | 42-46 | R C |
| 25, 73, 116 | B xiii | |
| cement rock..... | 34 | xi |
| Stratified deposits on, notes by Coleman..... | 227 | A xiii |
| Waterpower of..... | 252 | vii |
| River Navigation Co. | | |
| Mica boiler covering adopted by, tp., LINCOLN CO. | 32 | v |
| Beach in. See St. David. | | |
| Cement works in..... | 108 | i |
| See also Queenston. | | |
| Limestone quarrying in..... | 73 | B xiii |
| Nibs. | | |
| Steel used for, annual consumption..... | 185 | iv |
| Niccolite (NICKELINE OR NICKELITE). | | |
| Cobalt dist..... | xi, 99-101 | A xiii |
| 12, 13 | B xiv | |
| 145 | C xiv | |
| 23 | A xv | |
| analysis..... | 19 | B xiv |
| Gillies limit..... | 9 | A xvi |
| Hudson tp..... | 51 | B xiv |
| Composition of..... | 98 | A xiii |
| Determination of..... | 203, 213 | vi |
| Hardness of..... | 202 | vi |
| Joachimsthal, Bohemia..... | 61 | B xiv |
| Michipicoten island..... | 444 | R C |
| 194 | ii | |
| 205 | ix | |
| Pihuamo, Mexico..... | 71 | B xiv |
| Port Arthur dist..... | 55, 58 | B xiv |
| Three A mine..... | 205 | ix |
| Schneeberg, Saxony..... | 90 | B xiv |
| Silver islet..... | 205 | ix |
| Specific gravity of..... | 202 | vi |
| 20 | B xiv | |
| Sudbury ores..... | 194 | ii |
| 10, 11 | B xiv | |
| Denison tp..... | 205 | ix |
| Gersdorffite m..... | 192 | ii |
| Macdonell m..... | 180 | ii |
| Worthington m..... | 282 | xii |
| 31, 142, 159 | C xiv | |
| Nichol, William | 52 | iii |
| 234, 235 | iv | |
| 58 | vi | |
| tp., WELLINGTON CO. | | |
| Guelf formation in..... | 121 | B xiii |
| Lime-kilns in. See Elora and Fergus. | | |
| Nicholas, John | 205 | iv |
| Nichols, J. L. | 225 | i |
| G. H. & Co. See next ref. | | |

Nichols Chemical Co.

See also American Madoc Mg. Co.

| | | |
|--|---------------|--------|
| Pyrites mining by, Capelton, Que..... | 153 | A xvi |
| Darling tp..... | 153 | A xvi |
| Madoc tp..... | 295 | xi |
| 95 | A xiii | |
| plant of..... | 79, 80 | A xvi |
| photos..... | 158, 197, 198 | A xvi |
| tests made by..... | 177 | R C |
| lake, MICHIPICOTEN DIV., ALG. | | |
| Greenstone on..... | 302 | A xiv |
| Minor ref. to..... | 285, 291 | A xiv |
| Nicholson, C. F. | 150 | x |
| Prof. H. Alleyne | 181-190 | A xiii |
| Isaac | | |
| • Sandstone quarrying by, Mono tp..... | 110 | ix |
| John | 53, 57 | xi |
| John T. | 217 | i |
| 8 | B xiii | |
| Marshall | 22 | i |

Nickel.

| | | |
|--|---------------|-------|
| Alloys of..... | 373 | R C |
| 182-184 | iv | |
| aluminium..... | 217 | vii |
| notes..... | 381-387 | R C |
| 159, 160 | ii | |
| steel..... | 384 | R C |
| 9 | i | |
| for armour plate..... | 45-47 | vi |
| notes by Blue..... | 179-181 | iv |
| Jaques .. | 194-198 | iv |
| Roberts-Austen..... | 115 | viii |
| Sperry .. | 185-189 | iv |
| See also Nickel steel. | | |
| Ammunition coated with..... | 146, 147, 153 | ii |
| notes by Levat..... | 160 | ii |
| British Columbia..... | 145 | C xiv |
| Lillooet..... | 151 | C xiv |
| Cheapening of, processes for..... | 23 | iv |
| Coinage of..... | 373 | R C |
| 145 | ii | |
| 164 | C xiv | |
| composition..... | 184 | iv |
| countries using..... | 161 | ii |
| 224 | ix | |
| Germany..... | 182 | iv |
| Description of..... | 538 | R C |
| Discovery of, 1751..... | 381 | R C |
| Distribution of, notes by Blue..... | 176 | i |
| Merritt..... | 88-90 | R C |
| Europe, Greenland..... | 151 | C xiv |
| Italy..... | 151 | C xiv |
| Norway, compared with Canadian .. | 283 | xii |
| notes by Henriksen .. | 178 | iv |
| percentage in ores..... | 154 | C xiv |
| notes by Coleman .. | 146, 147 | C xiv |
| Exhibit of, at World's Fair..... | 191 | iii |
| 106-128 | | |
| Extraction of, by Mond process, methods..... | 132-134 | ii |
| Future of, notes by Blue..... | 135, 136 | ii |
| Industry of, sketch by Bain..... | 213-224 | ix |
| See also below. Mining. | | |

| | Page. | Vol. |
|------------------------------------|----------|--------|
| Nickel.—<i>Con.</i> | | |
| Lake of the Woods..... | 129 | ii |
| See also Keewatin nickel m. | | |
| Metallurgy of, paper by Levat..... | 149-162 | ii |
| Micro-photo of a granule of..... | 113 | viii |
| Minerals of, paper by Emmens..... | 167-170 | ii |
| Mining of, reports on for:— | | |
| 1891..... | 229-234 | i |
| 1892..... | 243-249 | ii |
| 1893..... | 182-291 | iii |
| 1894..... | 239-249 | iv |
| 1895..... | 267-274 | v |
| 1896..... | 270-277 | vi |
| 1897..... | 93-97 | vii |
| 1898..... | 33-37 | viii |
| 1899..... | 94-100 | ix |
| 1900..... | 121-125 | x |
| 1901..... | 276-286 | xi |
| 1902..... | 117, 125 | xii |
| 1903..... | 82-87 | A xiii |
| 1904..... | 68-72 | A xiv |
| 1905..... | 63-66 | A xv |
| 1906..... | 62-67 | A xvi |
| New Caledonia. | | |
| competing with Canada..... | 135 | ii |
| discovery..... | 161 | ii |
| effect on prices..... | 236 | xii |
| exhibit at World's Fair..... | 388 | R C |
| free from sulphur..... | 191 | iii |
| mining, notes..... | 145 | ii |
| by Glasser..... | 373 | R C |
| Levat..... | 147-150 | C xiv |
| photo..... | 149-152 | ii |
| notes by Charleton..... | 223, 224 | ix |
| paper by Bain..... | 178 | iv |
| production, 1875-1902..... | 213-216 | ix |
| 1901..... | 157 | C xiv |
| Ores of, notes..... | 6 | A xiii |
| by Goodwin..... | 443-445 | R C |
| smelting of..... | 213, 214 | vi |
| Prices of, 1892..... | 234-236 | i |
| 1895..... | 135 | ii |
| 1905..... | 213 | vi |
| fluctuation in..... | 15 | B xiv |
| Properties of..... | 162 | ii |
| Prospecting for, hints on..... | 182-184 | iv |
| Pyrrhotite containing, paper by | 457 | R C |
| Emmens..... | 162-166 | ii |
| Quebec prov., Bay St. Paul..... | 231 | vii |
| Daillebout seig..... | 443 | R C |
| Eastern tps..... | 150 | C xiv |
| Refining of, suggested law re..... | 229 | ix |
| works for | | |
| France..... | 151 | ii |
| Swansea. See Swansea. | | |
| United States..... | 131 | ii |
| Constable Hook. See | | |
| Constable Hook. | | |
| St. Stephen, N. B..... | 88 | i |
| 145 | C xiv | |
| Schneeberg, Saxony..... | 89 | B xiv |
| Separation of, from copper, notes | | |
| by Levat..... | 156 | ii |
| Statistics of:— | | |
| method of computing..... | 5 | A xvi |
| New Caledonia, 1875-1902..... | 157 | C xiv |
| 1901..... | 6 | A xiii |

Nickel.—*Con.*

Statistics of.—*Con.*

| | Page. | Vol. |
|--------------------------------------|-------------------|-----------|
| Ontario, 1888..... | 72 | R C |
| 1891..... | 6 | i |
| 1892..... | 8-11, 134 | ii |
| 1893..... | 8, 10 | iii |
| 177-179 | iv | |
| ix | viii | |
| 1894... 11, 20-22, 177, 178 | iv | |
| 1895..... | 11, 18, 19 | v |
| 1896..... | 13, 40, 41 | vi |
| ix | viii | |
| 1897..... | 15, 25 | A vii |
| v, vi | B vii | |
| 1898..... | 11, 18 | viii |
| 1899..... | ix | viii |
| 13, 17, 18 | ix | |
| 1900..... | 7, 11, 12, 35, 36 | x |
| 1901..... | 8-13, 19-21 | xi |
| 1902..... | 12, 13, 17, 288 | xii |
| 154 | C xiv | |
| 1903..... | 2, 6 | A xiii |
| 1904..... | 1-3, 9-11, 44, 68 | A xiv |
| 154 | C xiv | |
| 1905..... | 1-3, 10-13 | A xv |
| 1906..... | 3-15 | A xvi |
| United States, 1876-1891..... | 131 | ii |
| 1888..... | 525 | R C |
| World's production, 1875..... | 373 | R C |
| 1893-99..... | 215 | ix |
| 1889-1903..... | 157 | C xiv |
| notes by Levat..... | 161, 162 | ii |
| Supply of, danger of exhaustion..... | 147 | ii |
| Treatment of ores of, at Sault Ste. | | |
| Marie..... | 154 | ix |
| United States. | | |
| evidence before Dingley com- | | |
| mittee..... | 42-45 | vi |
| Gap mine, Pa..... | 213 | ix |
| 146 | C xiv | |
| exhaustion..... | 28 | vii |
| method of treatment..... | 404 | R C |
| output..... | 182 | ii |
| pyrrhotite in, analysis..... | 163 | ii |
| shut down, 1891..... | 131 | ii |
| Marion (near), Kentucky..... | 71 | B xiv |
| notes by Coleman..... | 146 | C xiv |
| production, 1875-1891..... | 131 | ii |
| 1888..... | 525 | R C |
| tariff on, notes..... | 28 | vii |
| Uses of..... | 223 | ix |
| 163, 164 | C xiv | |
| notes by Blue..... | 144-148 | ii |
| <hr/> | | |
| Cobalt dist..... | 96 | A xiii |
| not paid for..... | 8 | A xv |
| production, 1904..... | 10 | A xiv |
| 14 | B xiv | |
| 1905..... | 9 | A xv |
| 15 | B xiv | |
| 1906..... | 10 | A xvi |
| Glamorgan tp..... | 231 | vii |
| Hawk lake, Michipicoten div..... | 11 | Bull. iii |
| 206 | vii | |
| Leeds tp..... | 220 | v |
| McConkey tp..... | 171 | ix |
| Caribou lake..... | 262 | viii |

| | Page. | Vol. |
|--|----------|-------------------------|
| Nickel.—Can. | | |
| Michipicoten island..... | 58 | B xiv |
| notes..... | 443, 444 | R C |
| Net lake, Timagami dist..... | 173 | ix |
| ..... | 174 | x |
| ..... | 145 | c xiv |
| Parry island, in pyrrhotite..... | 261 | viii |
| ..... | 168 | ix |
| Port Arthur silver dist..... | 57 | B xiv |
| McGregor tp..... | 58 | B xiv |
| Three A mine..... | 28, 198 | R C |
| Seeley Bay, in titaniferous ores..... | 230 | vii |
| Silver islet..... | 52 | B xiv |
| Storrington tp..... | 220 | v |
| Sudbury dist..... | 129, 131 | ii |
| <i>See also</i> Northern nickel | | |
| range..... | | |
| amount available, estimate..... | 153 | ii |
| copper with..... | 22 | A xvi |
| proportion..... | 378 | R C |
| discovery..... | 122 | iv |
| ..... | 134 | c xiv |
| evidence before R. C. 59, 103-106..... | | R C |
| Garson tp..... | 39 | A xvi |
| mining of..... | | <i>See above.</i> |
| notes by Bell..... | 433, 434 | R C |
| ..... | 88, 89 | i |
| Roberts-Ansten, 106, 107..... | | viii |
| Onaping (near), photo..... | 224, 225 | A xiii |
| origin of..... | 277, 278 | xii |
| production of, 1890-1902..... | 288 | xii |
| 1890-1904..... | 154 | c xiv |
| increasing..... | 56 | A xvi |
| pyrrhotite with, percentage..... | 405 | B C |
| report by Coleman..... | 235, 303 | xii |
| Pt..... | | c xiv |
| smelting of ores, notes by | | |
| R. C..... | xxii | R C |
| treatment of ores..... | 404, 405 | R C |
| notes by Levat..... | 153-155 | ii |
| Wallace mine, L. Huron..... | 24 | R C |
| ..... | 221 | i |
| ..... | 58 | B xiv |
| Wanapitei Lake dist.:— | | |
| discovery..... | 434 | R C |
| Vermilion river..... | 152 | x |
| arsenical..... | | <i>See Niccolite.</i> |
| bearing eruptive..... | | |
| Sudbury dist., notes by Coleman..... | | |
| Throughout..... | | c xiv |
| <i>See also</i> Sudbury dist. reports. | | |
| Belt Mining Co. | | |
| Capital and date of charter..... | 11 | vii |
| bloom..... | | <i>See Annabergite.</i> |
| carbonyl..... | | |
| Notes on, by Roberts-Ansten..... | 107 | viii |
| Cliff mine , ARMOUR TP., P. S. D. | | |
| Boring in, for nickel-copper..... | 44 | A xiii |
| Notes on, 1901..... | 286 | xi |
| Copper Co. | | |
| Capital and date of charter..... | 10 | ix |
| Exhibits of, at Pan-American Ex- | | |
| hibition..... | 86, 90 | xi |
| Not included in International | | |
| Nickel Co..... | 22 | xi |
| Officers of..... | 222 | ix |
| Prospecting by, near Salter tp..... | 79 | A xiii |

Nickel Corporation, Ltd.

| | Page. | Vol. |
|--|---------------|--------|
| Included in International Nickel | | |
| Co..... | 22 | xi |
| ..... | 140 | c xiv |
| glance. <i>See</i> Gersdorffite. | | |
| gymnite. <i>See</i> Genthite. | | |
| lake , BOWELL TP., NIP. | | |
| Ore deposit of..... | 275 | xii |
| Rocks near, gossan..... | 70 | c xiv |
| lake , WATTEN TP., R. R. D. | | |
| Gold mining on..... | 55 | iv |
| Iron ore on..... | 134, 135, 143 | xi |
| ..... | 309 | xii |
| pyrites..... | 74 | iv |
| ..... | 207 | ix |
| ..... | 296 | xi |
| ..... | 150 | A xvi |
| Notes by Coleman..... | 175 | A xvi |
| Schists on..... | 86 | iv |
| mt. , N. OF SUDBURY, NIP. | | |
| Rocks of, gabbro..... | 294 | xii |
| petrography..... | 206 | x |
| oxide. | | |
| Sudbury dist., analysis..... | 180 | ii |
| plating. | | |
| Process of..... | 158, 159 | ii |
| silicate. <i>See</i> Genthite. | | |
| steel. | | |
| For armour plate, ordnance, etc. | | |
| Great Britain..... | 110 | ii |
| paper by blue..... | 14-144 | ii |
| Jaques..... | 139-141 | ii |
| ..... | 194-198 | iv |
| Sperry..... | 182-194 | iv |
| United States, notes by Tracy..... | 136-138 | ii |
| Gangee's experiments on, notes | | |
| by Ritchie..... | 168 | c xiv |
| Notes by Coleman..... | 164-166 | c xiv |
| Ontario's advantages for making..... | 111 | ii |
| Qualities of..... | 385 | R C |
| Torsion tests on, notes by Riley..... | 385 | R C |
| Uses of, notes by Riley..... | 386 | R C |
| sulphate. <i>See</i> Millerite. | | |
| vitriol. <i>See</i> Morenosite. | | |
| Nickeline or Nickelite. <i>See</i> Niccolite. | | |
| Nickerson, R. B. | 58 | A xvi |
| Nicol (INDIAN). <i>See</i> Mainville, Nicol | | |
| Prof. William | | |
| Analysis by, of tale from Grims- | | |
| thorpe tp..... | 101 | iii |
| Dyscrasite and smaltite found by, | | |
| Cobalt ores..... | 98 | A xiii |
| Experiments by, on corundum, | | |
| ref. to..... | 246 | vii |
| Lecturer at Kingston Univer- | | |
| sity..... | 215, 216 | i |
| Notes by, on corundum crystals | | |
| of Hastings dist..... | 216, 217 | vii |
| Report by, on mineralogical dept. | | |
| of Kingston Mg. School..... | 261 | vii |
| Report by (and Goodwin) on | | |
| Summer Mg. classes..... | 282, 283 | viii |
| Smaltite and pyrrargyrite from | | |
| Cobalt measured and drawn | | |
| by..... | 14, 21 | B xiv |

| | Page. | Vol. |
|---|----------|--------|
| Nichols, Henry H. | | |
| Evidence by, before R. C. re:— | | |
| duty on mining machinery..... | 232 | R C |
| silver, Port Arthur dist..... | 202 | R C |
| technical education..... | 427 | R C |
| want of railways..... | 240 | R C |
| Niederpfannensteil, Saxony. | | |
| Cobalt works at..... | 88 | B xiv |
| Nierling, J. J. | 143 | x |
| | 80 | xii |
| Night-hawk lake, Frederick House River. | | |
| Boulders on, photo..... | 128, 129 | A xiii |
| Climate of..... | 184 | vi |
| Ducks on..... | 193 | viii |
| Glaciation on..... | 115 | A xiii |
| drift deposits..... | 183 | vi |
| striae..... | 181 | vi |
| Gold on, notes by Miller..... | 220 | xvi |
| Indians on..... | 181 | vi |
| photo of hut..... | 128, 129 | A xiii |
| Insects on, injurious..... | 128, 129 | A xiii |
| Jasper on..... | 187 | x |
| Moose around..... | 127 | A xiii |
| Notes on, by Kay..... | 106, 107 | A xiii |
| Parks..... | 175, 176 | viii |
| Outlet of, northwards..... | 181 | vi |
| Photo of..... | 184, 185 | viii |
| Rocks near..... | 121 | A xiii |
| aqueous origin..... | 199 | A xiv |
| dolerite..... | 116 | A xiii |
| slate..... | 116, 117 | A xiii |
| Route to, from Mattagami river, description..... | 106 | A xiii |
| description..... | 129 | ix |
| size of..... | 105-108 | A xiii |
| Size of..... | 168 | vi |
| Soil on and near..... | 177 | vi |
| clay, photo..... | 192 | viii |
| clay, photo..... | 142 | ix |
| storms on..... | 122, 133 | A xiii |
| trees on and near..... | 128, 129 | A xiii |
| vegetables grown on..... | 123 | A xiii |
| river, Night-hawk lake, Nip. | | |
| Camp near, photo..... | 184, 185 | viii |
| Glacial striae near..... | 115 | A xiii |
| Notes on, by Kay..... | 107, 108 | A xiii |
| Parks..... | 175 | viii |
| Trees on..... | 123-125 | A xiii |
| Nijni, Novgorod Prov., Russia. | | |
| Peat in..... | 217 | ii |
| Nikolsky, Petersburg Prov., Russia. | | |
| Peat at..... | 217 | ii |
| Nile, The, Egypt. | | |
| Alluvial deposits of..... | 107 | iii |
| Nina (Scovil-Moore) gold mine, Sturgeon Lake, L. of the Woods. | | |
| Notes on, 1899..... | 47 | ix |
| 1900, idle..... | 75 | x |
| Mining Co. | | |
| Capital and date of charter..... | 9 | x |
| Notes on, 1900..... | 76 | x |
| See also Nina gold mine. | | |

| | Page | Vol. |
|--|------------------------------|--------|
| Nine-mile lake, near Sturgeon Lake, Th. B. and R. R. dists. | | |
| Notes on, by Miller..... | 87 | xii |
| Syenite on..... | 104 | xii |
| Nineveh, Assyria. | | |
| Notes on..... | 166 | i |
| Ninnia tp., Hastings Co. | | |
| Old name for Lake tp..... | 15 | ii |
| Nino gold mine, Tille Lake, L. of the Woods dist. | | |
| Notes on, 1902..... | 95 | xii |
| Work at, suspended..... | 64 | A xiii |
| Niobates. See Columbite. | | |
| Niobic acid. | | |
| Lyndoch tp., in a columbite mineral..... | 236 | vii |
| Nipigon, Nipigon Bay, L. Superior. | | |
| Iron ore from, at World's Fair.. | 82 | ii |
| sand at, attempt to mine.... | 73 | A xiii |
| Route from, to L. Windigokan. | 136, 137 | A xvi |
| bay, L. Superior. | | |
| Gold near..... | 115 | R C |
| Laccolithic sills on..... | 256 | A xiv |
| Rocks on and near:— | | |
| Animikie..... | 18 | R C |
| Huronian..... | 124 | iv |
| Nipigon formation..... | 36-38, 67 | R C |
| sandstone for quarrying..... | 62 | R C |
| trap..... | 15 | v |
| photo..... | 112, 113 | A xiii |
| Silver on, notes by P. McKellar.. | 267 | v |
| Zonochlorite from..... | 194 | ii |
| formation..... | 212 | ix |
| See also Keweenaw formation. | | |
| Canada, thickness of..... | 195 | v |
| Distribution and character, notes by Bell..... | 36, 37 | R C |
| Lake Superior..... | 204 | v |
| Mamainse pen..... | 102 | R C |
| Nipigon bay..... | 62 | R C |
| House, L. Nipigon, Th. B. d. | | |
| Rocks in vicinity of..... | 38 | R C |
| lake, Th. B. d. | | |
| Altitude of..... | 202 | v |
| Area of..... | 105, 135 | A xvi |
| Area of..... | 111 | iv |
| Copper prospecting on..... | 115 | A xvi |
| Country in vicinity, description..... | 111, 112 | iv |
| Fall from, to L. Superior..... | 109 | iv |
| Fish of..... | 110, 111 | A xvi |
| notes by Miller and Parks..... | 310, 311 | xii |
| prospecting..... | 24, 265 | xi |
| report by Bain..... | 212-214 | x |
| Coleman..... | 105-135 | A xvi |
| Moore..... | 136-148 | A xvi |
| Italy..... | 70 | ii |
| Indian encampment on, photo.. | 143 | A xvi |
| graves on, photo..... | 146 | A xvi |
| Iron ore on and near..... | 68 | R C |
| map showing locations.... | 15 | A xv |
| map showing locations.... | 310, 312 | xii |
| map showing locations.... | 108, 109 | A xvi |
| Marl on..... | 37 | R C |
| Notes on, geological..... | 111 | B xiii |
| Photos of..... | 110, 118, 125, 133, 139, 140 | A xvi |

| | Page. | Vol. | | Page. | Vol. |
|--|--------------------|--------|---|------------------|--------|
| Nipigon lake, TH. B. D.—<i>Con.</i> | | | Nipissing lake, NIP.—<i>Con.</i> | | |
| Rocks on, Animikie..... | 115 | A xvi | Rocks on, limestone..... | 22, 94 | B xiii |
| basic eruptive..... | 122, 123 | A xvi | crystalline..... | 81 | B xiii |
| Huronian..... | 18 | R C | notes by Barlow..... | 83, 84 | B xiii |
| | 169 | i | Silver in..... | 204 | R C |
| | 124 | iv | mine, COBALT, NIP. | | |
| Keweenawan..... | 36-38, 67 | R C | Accident at..... | 34, 35 | A xvi |
| trap..... | 37 | R C | Acreeage of..... | 7 | A xv |
| Topography of..... | 107, 110 | A xvi | Cobalt in..... | 11 | A xv |
| river, L. SUPERIOR. | | | Notes on..... | 79 | A xv |
| Beaches on..... | 105 | A xvi | Option on, held by Guggenheims..... | 14 | A xvi |
| Description of..... | 107, 110, 136 | A xvi | Photo of..... | Frontis. | B xiv |
| Marble on..... | 233 | R C | Mines Co. | | |
| Minor ref. to..... | 202 | v | Capital and date of charter..... | 24 | A xiv |
| Photos of..... | 106, 123, 128, 130 | A xvi | Dividends paid by, 1906-7..... | 13 | A xvi |
| Rocks on, basic eruptive..... | 133 | A xvi | Minor ref. to..... | 15 | B xiv |
| diabase, photo..... | 137 | A xvi | Producing, 1905..... | 7 | A xv |
| Timber in vicinity of..... | 111 | iv | 1906..... | 8 | A xvi |
| Water-power on..... | 252 | vii | Properties of..... | 5 | A xiv |
| Nipissing and James Bay Ry. | | | tp., P. S. D. | | |
| Surveys by, N. of North Bay..... | 105 | iv | Limestone in..... | 94 | B xiii |
| Character of country traversed | | | Nishikowgenda lake, E. OF MAT- | | |
| by..... | 136 | iv | TAGAMI LAKE, ALG. | | |
| beach, L. SUPERIOR. | | | Description of..... | 182 | x |
| Notes on, by Taylor..... | 193 | vii | Striae at, direction..... | 211 | x |
| Copper and Silver Co. | | | Nissen, P. Norman | | |
| Capital and date of charter..... | 23 | A xvi | Acknowledgments to..... | 60, 80 | xii |
| dist. | | | Licence to..... | 143 | x |
| Cobalt in. <i>See</i> Cobalt dist. | | | Manager, Ely iron m..... | 71 | xi |
| Gold in. <i>See</i> Larder lake. | | | Grace gold m..... | 68, 237 | xi |
| Vermilion river. | | | | 139 | x |
| Wanapitei lake. | | | | 64, 65, 78, 79 | xii |
| Iron in, occurrences..... | 317 | xii | | 47 | A xiii |
| ores of, report by Miller..... | 160-180 | x | Hornblende Mg. Co..... | 114 | ix |
| <i>See also</i> Boston and Hutton tps. | | | photo..... | 80, 81 | xii |
| Limestone in, notes by Miller..... | 81 | B xiii | Nissen, Mrs. P. N. | | |
| Maps of. <i>See</i> Maps | | | Niswanger, W. T..... | 87 | x |
| Mica mining in..... | 278 | vi | Nith river, GRAND RIVER. | | |
| Mininglands in, statistics of sales | | | Plaster mill on..... | 114 | i |
| and leases, 1891..... | 7, 8 | i | Nitro-glycerine. | | |
| 1892..... | 6 | ii | Sulphuric acid for..... | 193 | A xvi |
| 1893..... | 5, 6 | iii | Niven, Alexander | | |
| 1894..... | 10 | iv | Acknowledgments to..... | 169 | vi |
| 1895..... | 9, 10 | v | | 196 | viii |
| 1906..... | 26 | A xvi | | 142 | ix |
| Nickel in. <i>See</i> Sudbury dist. | | | Base line of, 1899, report on by | | |
| Population of unorganized por- | | | Parks..... | 124-142 | ix |
| tion, 1891..... | 134 | iv | Notes by, on northern Mississagi | | |
| Pyrites in. <i>See</i> Timagami dist. | | | dist..... | 168 | xii |
| Reports on explorations in:— | | | Photo of, and party, on Montreal | | |
| Abitibi dist. <i>See</i> Abitibi dist. | | | river..... | 184, 185 | viii |
| northern, J. M. Bell..... | 135-179 | A xiii | Refs. to surveys by, L. of the | | |
| Timiskaming lake, northwards, | | | Woods dist..... | 42 | A xvi |
| Miller..... | 214-230 | xi | Timiskaming dist..... | 58 | R C |
| western. <i>See</i> Nipissing-Algomaa | | | | 39, 40 | A xvi |
| boundary line. | | | Work by, 1889..... | 175 | xii |
| Silver in. <i>See</i> Cobalt dist. | | | 1890..... | 165, 166 | vii |
| =Algoma boundary line. | | | 1896..... | 167 | vi |
| Maps of. <i>See</i> Maps | | | 1897..... | 161, 162 | vii |
| Reports on, Burwash..... | 167-177 | vi | 1902..... | 5, 157, 161, 166 | xii |
| Parks..... | 175-196 | viii | 1905..... | 116 | A xv |
| lake, NIP. | | | Nivison, R. E. | | |
| Agricultural land around..... | 207 | v | Nobbs, H..... | 86 | A xiv |
| Altitude of..... | 104 | C xiv | Noble, John D. | | |
| Drained by French river..... | 201 | v | Evidence by, before R. C..... | 165 | R C |
| Forest fires S. of (1871)..... | 206 | v | Part owner, oil-refinery, Petrolea. | 27 | v |
| Gold mining on, 1892..... | 237 | ii | Noble, J. J. | | |
| Iron on. <i>See</i> Iron island. | | | bay, RIDEAU CANAL. | | |
| Peat north of..... | 191 | i | Mica mining on..... | 130 | xii |
| west of..... | 209 | ii | | | |

| | Page. | Vol. |
|---|----------|--------|
| Noel, J. | 104 | viii |
| | 117 | ix |
| | 143 | x |
| No-fish bay, KABENUNG LAKE. | | |
| Iron formation near. | 315, 329 | A xiv |
| Noisy river, L. SUPERIOR. | | |
| Iron formation on. | 178 | A xv |
| river, SIMCOE CO. | | |
| Calcareous tufa on. | 110 | B xiii |
| Marl on. | 51 | B xiii |
| Nolan, H. | 197 | vii |
| creek, GRAND RIVER. | 198 | iii |
| Nomenclature, geographical | | |
| Abitibi. | 192 | viii |
| Atikokan. | 72, 140 | v |
| Baboon falls, Mississagi river. | 149 | viii |
| Bella Donna lake. | 160 | xii |
| Blacksmith rapid, Abitibi river. | 189 | viii |
| Blanche river, L. Timiskaming. | 214 | xi |
| Blue lake, Michipicoten div. | 197 | vii |
| Bruce and Wellington mines. | 96 | R C |
| Chaminiss hill. | 219 | xi |
| Clay falls, Abitibi river. | 184 | viii |
| Denison falls, Dog river. | 141 | viii |
| Duck lake, near Shebandowan lake. | 118 | v |
| El Diver gold mine. | 29 | iii |
| Elbow lake, R. R. D. | 139 | v |
| Fort Frances. | 40 | iv |
| Fort William. | 198 | v |
| Frenchmen rapid, Whitefish lake, Michipicoten div. | 190 | vii |
| Goetz lake. | 158 | ix |
| Kamanistikwia. | 198 | v |
| Knickerbocker inlet, L. of the Woods. | 119 | vii |
| Lake of Bays. | 167 | vii |
| Logan int., Que. | 220 | i |
| Madawaska river. | 244 | viii |
| Manitou Lake dist., after Dickens. | 87, 88 | vi |
| Manitou lake. | 52 | v |
| Mosher bay. | 87 | vi |
| Metchewedenong. | 79 | B xiii |
| Miller island, L. of the Woods. | 171 | v |
| Miller lake. | 197 | vii |
| Minnitaki lake. | 56 | v |
| Missinaibi. | 187 | vii |
| Murray mine. | 284 | xii |
| Obatonga lake. | 140 | viii |
| Paint lake. | 161 | ix |
| Petawawa river. | 220 | i |
| Pic river, L. Superior. | 135 | viii |
| Quaquaquitchwanook lake. | 179 | viii |
| Scott lake. | 158 | ix |
| Separation lake. | 112 | A xiii |
| Sesekinaka lake. | 181 | xii |
| Sesquama river. | 191 | vii |
| Spectacle lake. | 222 | xi |
| Tomstown. | 51 | A xvi |
| Wawiatan rapid, Mattagami river. | 127 | ix |
| Waubamik. | 280 | v |
| Whiskey Jack lake. | 73 | v |
| Windigoostigwan lake. | 138 | v |
| Yellow-girl pt., L. of the Woods. | 181 | v |
| geological, etc. | | |
| Animikie formation. | 31 | R C |
| | 133 | vi |
| Anthraxolite. | 162 | vi |

| | Page. | Vol. |
|--|------------|---------|
| Nomenclature, geological, etc.—Con. | | |
| Artemisia gravel. | 51 | R C |
| Black River formation. | 41 | R C |
| Blueite. | 169 | ii |
| Cambrian. | 31 | R C |
| Chazy. | 41 | R C |
| Corniferous. | 16 | R C |
| | 25 | B xiii |
| Corundum. | 230 | viii |
| emery. | 533 | R C |
| Devonian. | 46 | R C |
| Folgerite. | 168 | ii |
| Formations and systems, notes. | 4 | R C |
| Graphic granite. | 535 | R C |
| Guelph formation. | 44 | R C |
| Hamilton formation. | 4, 47 | R C |
| | 25 | B xiii |
| Hudson River formation. | 43 | R C |
| Huronian. | 18, 535 | R C |
| Keewatin formation. | 19 | R C |
| Labradorite. | 225 | vi |
| Medina formation. | 43 | R C |
| Nipigon (Keweenawan) formation. | 133 | vi |
| Onondaga formation. | 45 | R C |
| Perthite. | 188 | ii |
| Portland cement. | 16 | B xiii |
| Potsdam formation. | 39 | R C |
| Pre-Cambrian, report of the International Committee. | 269-277 | A xiv |
| Silurian. | 40 | R C |
| Sperryllite. | 181 | R C |
| Svenite. | 543 | R C |
| Utica formation. | 42 | R C |
| Whartonite. | 170 | ii |
| Wilsonite. | 188 | ii |
| | 242 | viii |
| Nonesuch gold mine, SKUNK ISLAND, L. OF THE WOODS, R. R. D. | | |
| Notes on, 1896. | 48, 252 | vi |
| sandstone. | 83, 84, 87 | iii |
| Nonionina. | | |
| Ottawa. | 225 | x |
| Nonwatin (CALM) lake, SEINE RIVER, TH. B. D. | | |
| Description of. | 68, 69 | v |
| Glacial striae on. | 89 | v |
| Gold mining near. | 5 | Bull. i |
| | 79 | vi |
| | 76 | ix |
| Iron ore near. | 135 | xi |
| | 311 | xii |
| Notes on, by Blue. | 150, 151 | v |
| Noorland prov., SWEDEN. | | |
| Peat in. | 219 | ii |
| Nora gold mine, WESTERN PEN., L. OF THE WOODS, R. R. D. | | |
| Depth of, 1900. | 35 | ix |
| Notes on, 1899. | 60 | ix |
| Norberg, SWEDEN. | | |
| Iron ores of. | 348 | R C |
| Norburg—? | 194 | R C |
| Nordenskiold, Baron A. | | |
| Ref. to surveys by, in Greenland. | 151 | c xiv |
| Nordensten, E. | | |
| Ref. to work by, on iron ore concentration. | 338 | xii |

| | Page. | Vol. |
|---|----------|--------|
| Norfolk, Duke of | 22, 247 | i |
| co., ONT. | | |
| Iron ore in, early working..... | 255 | R C |
| | 113 | i |
| Limestone in, notes by Miller... | 88 | B xiii |
| Corniferous and Hamilton.... | 25 | B xiii |
| Norite. | | |
| Parham, micro-photo | 216, 217 | viii |
| Sudbury dist..... | | |
| 240, 242, 256, 273, 293, 294, 298 | xii | |
| 11, 18, 61, 75-82 | c xiv | |
| analysis | 116, 117 | c xiv |
| Elsie mine (near), photo..... | 79 | c xiv |
| laccolithic..... | 121, 122 | c xiv |
| Lady Macdonald lake | 41 | c xiv |
| Northern Nickel range | 194, 196 | A xiii |
| Onaping river, petrography.... | 211 | A xiii |
| photo..... | 208, 209 | A xiii |
| petrography | 294 | xii |
| | 107-121 | c xiv |
| weathering of, photo..... | 80 | c xiv |
| Normal School, SOUTH KENSINGTON, | | |
| ENG. | | |
| Notes on, by R. C..... | 492 | R C |
| Norman, Andrew | | |
| Gold prospecting by, Jaffray tp. | 186 | v |
| | 108 | vi |
| Joseph Van. See Van Norman, | | |
| Joseph | | |
| Norman, NEAR KENORA, R.R.D. | | |
| Historical notes..... | 169 | v |
| Reduction works at..... | 98, 99 | viii |
| uncompleted..... | 88 | ix |
| tp., NIP. | | |
| Nickel mining in. See Whistle m. | | |
| Rocks in..... | 274 | xii |
| greenstone..... | 206 | x |
| magnetite, jaspery | 186 | x |
| nickel-bearing | 284 | xi |
| | 273, 276 | xii |
| notes by Culbert.. | 202-204 | A xiii |
| | 73 | c xiv |
| <i>See also Wapitei lake.</i> | | |
| Normandale, CHARLOTTEVILLE TP., | | |
| NORFOLK CO. | | |
| <i>See also Van Norman, Joseph</i> | | |
| Charcoal furnace at, 1813..... | 142 | xi |
| Norrie and Ashland iron mine, | | |
| Mich..... | 238 | i |
| Norris, Daniel | 102 | R C |
| Edward | | |
| Evidence by, before R. C. re :— | | |
| copper, Mamainse pen..... | 102 | R C |
| galena and silver, Batchawana | | |
| bay..... | 203 | R C |
| security of claims..... | 309 | R C |
| North America. | | |
| Copper production, 1880-87..... | 371 | R C |
| American Chemical Mining | | |
| and Mfg. Co. | | |
| Capital and date of charter..... | 11 | vii |
| | 156 | A xiv |
| Notes on, 1890..... | 109, 110 | j |
| Operating salt at Goderich..... | 190 | R C |
| | 111 | ix |
| | 21 | A xv |
| <i>See also Owen Sound Portland</i> | | |
| <i>Cement Co.</i> | | |

| | Page. | Vol. |
|---|----------|-------|
| North American Cobalt Refining Co. | | |
| Capital and date of charter.... | 30 | A xvi |
| Reduction works at Hamilton | | |
| proposed by | 12 | A xvi |
| American Stove and Asbestos | | |
| Co. | | |
| Work by, Marmora tp..... | 97, 137 | iii |
| Baltimore, Wood co., OHIO. | | |
| Cincinnati arch near | 116 | i |
| Bay, WIDDIFIELD TP., NIP. | | |
| Agricultural land near..... | 104 | iv |
| Brick clay in, analysis..... | 27 | B xv |
| Saugeen..... | 20, 21 | B xv |
| yards, notes..... | 83 | B xv |
| Country north of, character.. | 57, 58 | R C |
| Railway from to L. Timiskaming. | 179 | x |
| Reduction plant at..... | 12 | A xvi |
| Bay Brick and Tile Co. | | |
| Capital and date of charter..... | 28 | A xvi |
| Bluff silver mine, PORT AR- | | |
| THUR DIST., TH. B. D. | | |
| Controlled by Algoma Mg. Co.... | 96 | xii |
| brook, CLEAR LAKE, METHUEN | | |
| TP., PETERBORO CO. | | |
| Rocks in vicinity of..... | 213, 214 | viii |
| Burgess tp. See Burgess tps. | | |
| Carolina, U. S. | | |
| Corundum in..... | 62 | vi |
| | 213, 225 | vii |
| discovery..... | 242 | viii |
| notes..... | 19 | ix |
| price, 1897..... | 218 | vii |
| production, 1901..... | 39 | x |
| prospecting..... | 237 | viii |
| tests | 238, 239 | viii |
| Nickel ores in | 146 | c xiv |
| Platinum in | 142 | vii |
| Cayuga tp. See Cayuga tp. N. | | |
| channel, L. HURON. | | |
| Building-stone on..... | 93 | i |
| Emsley tp. See Emsley tps. | | |
| lake, NEAR GUNFLINT LAKE, | | |
| TH. B. D. | | |
| Iron ore on | 66 | ii |
| notes by Sedgwick..... | 126, 127 | R C |
| Map of (sketch) | 126 | R C |
| Lake Mineral Land Co. | | |
| Capital and date of charter..... | 11 | vii |
| Lee iron mine, NEAR TOWER, | | |
| MINN. | | |
| Notes on, by Merritt..... | 125 | R C |
| London R'y, ENGLAND. | | |
| Tests by, on peat as fuel..... | 194 | i |
| Moose river. See Missinaibi | | |
| river. | | |
| Ontario Reduction and Re- | | |
| fining Co. | | |
| Capital and date of charter..... | 21 | A xvi |
| Reduction plant of, Sturgeon | | |
| Falls..... | 12 | A xvi |
| pole. | | |
| Dip of large iron ore deposits to. | 467 | R C |
| Range Nickel and Iron Mg. | | |
| Co. | | |
| Capital and date of charter..... | 28 | A xvi |
| river, WANAPITEI LAKE, NIP. | | |
| Feldspathic quartzites on..... | 72 | i |
| Sherbrooke tp. See Sher- | | |
| brooke tp. N. | | |

| | Page. | Vol. |
|--|------------|------|
| North Shore Copper and Smelting Co. | | |
| Capital and date of charter..... | 37 A | xiii |
| Concentration plant of, photo. 64, 65 | A | xiii |
| shore lead mine, McTAVISH TP. <i>See</i> Enterprise mine. | | |
| Shore Nickel and Copper Mg. Co. | | |
| Capital and date of charter..... | 11 | vii |
| Shore Reduction Co. | | |
| Capital and date of charter..... | 5 | xii |
| Objects of : work by, 1903.... | 73, 74 A | xiii |
| Star, OSNABRUCK TP., STORMONT CO. | | |
| Gravel ridge near | 218 | x |
| Star apatite mine, PORTLAND TP., OTTAWA CO., QUE. | | |
| Depth of, 1890..... | 179 | R C |
| Pockets in, showing banded structure | 441 | R C |
| Star Mg. and Development Co. | | |
| Capital and date of charter..... | 11 | vii |
| Star (McCHARLES) nickel mine, SNIDER TP., ALG. | | |
| Acquired and worked by Mond Nickel Co | 34, 72 A | xiv |
| | 143 C | xiv |
| Notes on, 1903..... | 86 A | xiii |
| 1904..... | 72 A | xiv |
| Photos of..... | 208, 209 A | xiii |
| open pit | 36 C | xiv |
| Production of, 1902 | 125 | xii |
| 1901 | 10 A | xiv |
| Railway to | 136 C | xiv |
| Rocks of and near..... | 81 C | xiv |
| granite | 83 C | xiv |
| granitoid gneiss..... | 123 C | xiv |
| norite | 112 C | xiv |
| notes by Coleman | 36, 37 C | xiv |
| West Gold Dredging Co. | | |
| Capital and date of charter..... | 9 | x |
| Northampton Emery Wheel Co. | 240 | viii |
| Northamptonshire, ENGLAND. | | |
| Iron ores in, royalties on | 18 | i |
| Northeast arm, LARDER LAKE, NIP. | | |
| Ancient valley..... | 208 A | xvi |
| Camp on, photo..... | 217 A | xvi |
| Rocks on, dolomite..... | 207 A | xvi |
| section | 205 A | xvi |
| arm, TIMAGAMI LAKE, NIP. | | |
| Gneiss on..... | 69 | i |
| Northern Development Co. | | |
| Capital and date of charter..... | 38 A | xiii |
| Paymaster gold mine worked by. | 54 A | xiv |
| | 43, 58 A | xvi |
| Exploration Co. | | |
| Capital and date of charter..... | 26 A | xv |
| Giant Mg. Co. | | |
| Capital and date of charter..... | 9 | viii |
| Gold Co. | | |
| Mill of, notes and photo | 22-25 | iii |
| Work by, L. of the Woods..... | 232 | ii |
| | 21, 22 | iii |
| | 174-176 | v |
| Iron and Steel Co. | | |
| Capital and date of charter..... | 24 A | xiii |

| | Page. | Vol. |
|--|-------------|------|
| Northern Lights gold mine, EAGLE LAKE, R. R. D. | | |
| Producing, 1905..... | 4 A | xv |
| <i>See also</i> next ref. | | |
| Lights Mines Co. | | |
| Capital and date of charter | 9 | xii |
| Minor refs. to..... | 4 A | xiv |
| | 43 A | xvi |
| Work by, Eagle Lake dist..... | 93 | xii |
| | 5, 64, 65 A | xiii |
| | 49 A | xiv |
| | 54 A | xv |
| | 59 A | xvi |
| Pioneer island, L. of the Woods | 48 A | xiv |
| | 54 A | xv |
| Nickel range, ALG.-NIP. | | |
| Map of..... | With vol. | xiii |
| Notes on, by Coleman | 273-275 | xii |
| Report on | 192-221 A | xiii |
| | 62-75 C | xiv |
| <i>See also</i> Sudbury dist. | | |
| Oil and Gas Co. | | |
| Boring by, Manitoulin island..... | 72, 73 A | xv |
| Ontario Consolidated Copper Co. | | |
| Capital and date of charter..... | 30 A | xvi |
| Work by, 1906 | 41, 70 A | xvi |
| Ontario Copper Mg. Co. | | |
| Capital and date of charter..... | 30 A | xvi |
| Work by, 1905 | 69 A | xv |
| Ontario (OR SHILTON) pyrites mine. | | |
| Minor ref. to | 20 A | xv |
| Notes on | 61 A | xv |
| | 61 A | xvi |
| Pyrites Co. | | |
| Capital and date of charter | 31 A | xvi |
| Queen gold mine, NEAR WABIGOON, R. R. D. | | |
| Notes on, 1897..... | 77, 124 | vii |
| 1898..... | 275, 276 | viii |
| Ore of, character..... | 171 | vii |
| Northey Manufacturing Co. | 197 | vi |
| Northland Gold Co. | | |
| Capital and date of charter..... | 10 | ix |
| Mining Co. | | |
| Capital and date of charter..... | 28 A | xvi |
| Pyrites mining by, Rib lake | 21 A | xvi |
| Northrup, W. A. | | |
| Tin salting by, 1872..... | 138, 139 | viii |
| Northumberland co., ENGLAND. | | |
| Coal trade in | 16 | i |
| co., ONT. | | |
| Iroquois beach in, notes by Coleman..... | 230-232 A | xiii |
| Limestone in, notes by Miller... | 88 B | xiii |
| Northwest bay, RAINY LAKE, R. R. D. | | |
| Rocks on, granite | 50 | iv |
| Company, The | | |
| Historical notes | 197, 198 | v |
| Post of, Rainy lake | 162 | v |
| Ontario Mining and Development Co. | | |
| Capital and date of charter..... | 10 | ix |
| "Northwestern" ss. | 108 | v |

| | Page. | Vol. |
|---|----------|------|
| Northwestern Ontario Exploration Co. | | |
| Work by, in the New Klondike. | 42, 73 | viii |
| Norton, A. | | |
| Brick-yard of, Bolton..... | 89 B | xv |
| Thomas | | |
| Brick-yard of, Carlton West.... | 107 B | xv |
| W. J. | | |
| Brick-yard of, Alliston, notes.... | 99 B | xv |
| Norton Emery Wheel Co. | 240 | viii |
| iron works, PLATTSBURGH, N. Y. | | |
| Charcoal as fuel for..... | 481 | R C |
| Norwalk Mining Co. | | |
| Capital and date of charter..... | 30 A | xvi |
| Norway. | | |
| <i>See also Scandinavia.</i> | | |
| Apatite deposits of, character... .. | 438 | R C |
| origin..... | 443 | R C |
| Clèveite in..... | 217 | vi |
| Cobalt in, notes..... | 67 B | xiv |
| production, 1896-98.... | 70 B | xiv |
| Gneiss in, for building..... | 134 | iii |
| Iron ores of, character..... | 138, 392 | R C |
| smelting..... | 325 | R C |
| pyrites in..... | 192 A | xvi |
| Mining laws of..... | 300, 301 | R C |
| Nickel ores of, analyses of matte.. | 151 c | xiv |
| compared with | | |
| Canadian..... | 283 | xii |
| minerals in..... | 154 c | xiv |
| platinum..... | 162 c | xiv |
| notes by Bain..... | 213 | ix |
| Henrik- | | |
| sen... .. | 178 | iv |
| Stetzner..... | 17 c | xiv |
| Peat in, industry..... | 218, 219 | ii |
| for stoves..... | 196 | xii |
| photo of bog..... | 32, 33 A | xiii |
| Facing 192 | xii | |
| Silver ores of, mode of occurrence..... | 87 | v |
| gold mine, NEAR ROSSLAND, | | |
| R. R. D. | | |
| Notes on..... | 31 | iii |
| Rocks of..... | 49 | vi |
| Rocks of..... | 69 | iv |
| Norwegian Marsh Association. | 33 A | xiii |
| Norwich, N. NORWICH TP., OXFORD CO. | | |
| Brick-yards at, notes..... | 86 B | xv |
| clay for, analysis..... | 14 B | xv |
| Norwood, ST. LAWRENCE CO., N. Y. | | |
| Marine shells at..... | 242 A | xiii |
| Nosbonsing. See Astorville. | | |
| Notre Dame mts., GASPÉ PEN., QUE. | | |
| Undulations in strata of..... | 5 | R C |
| Nottamasagami lake, TH. B. D. | | |
| Huronian rocks on..... | 18 | R C |
| Nottawa quarry, MONO TP., DUFFERIN CO. | | |
| Notes on, 1899..... | 110 | ix |
| river, MISSINAIBI RIVER, ALG. | 195 | viii |
| Nottawasaga river, GEORGIAN BAY, L. HURON. | | |
| Cambro-Silurian on..... | 39 B | xiii |
| Erie clay on..... | 10 B | xv |
| Sandstone quarrying on..... | 99 | |

| | Page. | Vol. |
|--|---------|------|
| Nottawasaga tp., SIMCOE CO. | | |
| Cambro-Silurian in..... | 39 B | xiii |
| Limestone in..... | 109 B | xiii |
| Niagara formation..... | 49 B | xiii |
| quarrying. <i>See</i> Onatoot. | | |
| Lithographic stone in. <i>See</i> Col- lingwood. | | |
| Medina formation in..... | 43 | R C |
| Ochre in..... | 205 | ix |
| Nottaway river, JAMES BAY, QUE. | | |
| Timber in basin of..... | 204 | v |
| Noumea, NEW CALEDONIA. | | |
| <i>See also</i> New Caledonia and Nickel. | | |
| Harbour of..... | 150 | ii |
| Smelter at..... | 151 | ii |
| Noumeaite. <i>See</i> Garnierite. | | |
| Nova Scotia. | | |
| Arsenical ores in..... | 102 | xi |
| Coke in, quality..... | 104 | ii |
| Gold in, discovery..... | 115 | R C |
| mining, notes by Selwyn..... | 66, 67 | R C |
| Mining in, laws..... | 271-273 | R C |
| rents, licences and royalties..... | 10, 11 | i |
| statistics compulsory..... | 423 | R C |
| Silver Cobalt Mg. Co. | | |
| Capital and date of charter..... | 28 | xvi |
| silver mine, COLEMAN TP., NIP. | | |
| Notes on, 1905..... | 81 A | xv |
| Steel Co. | | |
| Bounty payments to, 1900..... | 32, 33 | x |
| Novaculite. | | |
| United States, production, 1888.. | 525 | R C |
| Novgorod dep., RUSSIA. | | |
| Miaschite in..... | 213 | vii |
| Nowell Gold Mg. Co. (ALASKA).... | 353 | R C |
| Noxos island, misprint for Naxos is- land. | | |
| N T gold loc., NEAR SHOAL LAKE, NEW KLONDIKE DIST. | | |
| Accident at..... | 25 | ix |
| Notes on..... | 63 | ix |
| Nuxella expansa. | | |
| Pakenham..... | 224 | x |
| <i>tenus.</i> | | |
| Greens creek, near Ottawa..... | 224 | x |
| Nugent, Thomas..... | 78 | ii |
| Nugget(s) (GOLD), | | |
| Wanapitei, in chlorite..... | 38 | iv |
| Nugget creek, WABIGOON LAKE, R.R. D. | | |
| Soil in valley of..... | 171 | vii |
| Gold Mg. Co. | | |
| Capital and date of charter..... | 11 | vii |
| Nullon, Joseph..... | 95 | ix |
| Number 3 mine, SUDBURY DIST. <i>See</i> Six and Six mine. | | |
| Nunnery. | | |
| Timiskaming lake, north of..... | 58. | R C |
| Nuphar advena. <i>See</i> Water Lily, yel- low pond | | |
| Nuremberg, BAVARIA. | | |
| Pencils made at..... | 37 | vi |
| Nuts (IRON AND STEEL). | | |
| Canadian imports of, 1881-87.... | 246-249 | R C |
| Nuzums Mills, WEST VIRGINIA. | | |
| Paving-clay from, analysis..... | 120 | iii |

| | Page. | Vol. | | Page. | Vol. |
|---|-------------|------|---|----------|------|
| Nystrom, Erik | | | Obabika lake , TIMAGAMI DIST., NIP. | | |
| Magnetic surveying by, Sudbury | | | Arms of | 36 B | xiv |
| dist. | 289 | xii | Geology of, notes by Parks | 176 | x |
| 15, 144 c | xiv | | Obatonga lake , DOG RIVER, L. | | |
| Oak. | | | SUPERIOR. | | |
| Fort Frances | 161 | v | Beach at, altitude | 176 | ix |
| Hudson Bay slope | 121 | iv | Character of | 285 A | xiv |
| L. of the Woods, Ash rapid | 51 | v | Notes on, by Willmott | 141 | viii |
| McConkey tp | 171 | ix | Oberschlema , SAXONY | 86, 88 B | xiv |
| Rainy Lake dist. | 96 | iv | Obicunimagunk lake , See Seven- | | |
| Rainy lake | 162 | v | mile lake. | | |
| Rainy river | 117 | iv | O'Brien, E. J. | 267 | viii |
| 207, 208 | v | | 69 | ix | |
| Fort St. Pierre | 197 | v | 80 | x | |
| Timiskaming Lake dist. | 118 | iv | M. J. See O'Brien silver | | |
| white | | | mine. | | |
| Heating power of | 54 B | xv | W. | 105 | vii |
| bay , L. SUPERIOR. | | | 117 | ix | |
| Indian cannibalism at | 138, 139 | v | and Kennedy gold claim , | | |
| lake , METHUEN TP., PETER- | | | WABIGOON LAKE, R. R. D. | | |
| BORO CO. | | | Quartz from, assay | 180 | vii |
| Barytes in | 213 | viii | silver mine , COBALT, NIP. | | |
| Rocks near | 193 | xi | Accident at | 34, 35 c | xvi |
| pt. , RAINY LAKE, R. R. D. | | | Close corporation | 13 c | xvi |
| Sand bars outside of | 166 | v | Notes on, 1905 | 80 A | xv |
| ridge , ALBION TP., PEEL CO. | | | Position of | 7 A | xv |
| Limestone at | 95 B | xiii | Royalties paid by | 27 c | xvi |
| Ridge , METHUEN TP., PETER- | | | Shipping, 1905 | 15 B | xiv |
| BORO CO. | | | Working, 1906 | 8 c | xvi |
| Reason for name | 209 | viii | Obsidian. | | |
| mica mine , NEAR WAUBAMIK, | | | Definition of | 538 | rc |
| McDOUGALL TP., P. S. D. | | | Notes on, by Miller | 234 | vi |
| Notes on, 1895 | 279 | v | Resemblance of, to fergusonite .. | 236 | vii |
| Ridges , WHITCHURCH TP., | | | Ochre. | | |
| YORK CO. | 53 | i | Blythfield tp | 205 | ix |
| Oakhill lake , NORTHUMBERLAND CO. | | | Boyer lake (Helen iron m.) | 189 A | xv |
| Notes on, by Coleman | 232 A | xiii | analysis | 169 | xi |
| Oakville , W. TRAFALGAR TP., HAL- | | | notes | 169 A | xvi |
| TON CO. | | | Composition of | 455 | rc |
| Iroquois beach at | 229 A | xiii | Definition of | 177 | i |
| Oats. | | | Esquering tp | 177 | i |
| Mentioned as grown at :— | | | L. of the Woods | 64 | rc |
| James bay | 107 | iv | Limehouse | 177 | i |
| Long Lake House | 112 | iv | Mattagami river | 128 | iv |
| Michipicoten div | 296 A | xiv | Nassagaweya tp | 205 | ix |
| Pringle tp | 170 | ix | Nottawasaga tp | 205 | ix |
| Rainy River dist. | 65 | rc | Occurrences (iron) | 200 | ix |
| Rainy river | 163 | v | Owen Sound | 205 | ix |
| Wabigoon | 62 | v | Paint lake | 161 | ix |
| Wanapitei Lake dist | 137 | vii | Production (Canadian), 1886-87. | 243 | rc |
| Oba lake , OBA RIVER, ALG. | | | molybdic See Molybdite. | | |
| Altitude and length of | 198 | vii | red | | |
| Photo of a stream entering .. | 140, 141 | vii | Lanark and Frontenac cos. | 177 | i |
| Rocks on | 198, 204 | vii | yellow | | |
| Swamp near, height of | 9 Bull. iii | | Boyer lake | 189 A | xv |
| 205 | vii | | analysis | 169 | xi |
| river , KABINAKAGAMI RIVER, | | | notes | 169 A | xvi |
| ALG. | | | Ochta , NEAR ST. PETERSBURG, RUSSIA. | | |
| Iron on | 127 | iv | Armour plate tests at | 142, 144 | ii |
| Obabicon bay , NIPIGON LAKE, | | | O'Connell, C. | 83 A | xv |
| TH. B. D. | 106 A | xvi | O'Connor, Anthony | | |
| lake , L. OF THE WOODS, ONT. | | | Mica mining by, S. Burgess tp .. | 194 | iii |
| Description of | 118 | vii | Daniel | | |
| Obabika bay , NORTHWEST ARM, TIMA- | | | Acknowledgments to | 160, 177 | x |
| GAMI LAKE. | | | Assistant to Coleman, 1899 | 172 | ix |
| Rocks on | 176 | x | Copper found by, Timagami dist. | | |
| 20 M.L. | | | 172, 173 | ix | |
| | | | Iron " " | 20 | xii |
| | | | tests on | 336 | xii |

| | Page. | Vol. |
|---|----------|------|
| O'Connor, Daniel—<i>Con.</i> | | |
| Jaspilite found by, Timagami dist | 167 | x |
| Part owner, Comstock gold m. | 270 | vi |
| Last chance gold m. | 269 | vi |
| lake, NEAR VERMILION LAKE, TIMAGAMI REG., NIP. | | |
| Iron ore on | 169-171 | x |
| analysis | 180 | x |
| tp., TH. B. D. | | |
| Argentite in | 194 | ix |
| Calcite in | 195 | ix |
| Harmotome in | 199 | ix |
| Mountain leather in | 205 | ix |
| Silver mining in. <i>See</i> Beaver silver mine. | | |
| Octibbeha co., MISS. | | |
| Nickel in siderite in | 151 c | xiv |
| Odell and Son. | | |
| Brick yard of, Ingersoll | 85 B | xv |
| Ottawa | 224, 225 | x |
| ..... | 29, 61 B | xv |
| ..... | 87 B | xiv |
| Oehme—? | | |
| Oeregrund iron. <i>See</i> Dannemora. | | |
| Oesterlin, Dr. Charles | 121 | i |
| Off-sett deposits. | | |
| Sudbury dist., notes by Coleman | 20, 21 c | xiv |
| Ogden, A. | 85 | x |
| Oil Co. | | |
| Exhibits of, at Buffalo | 25 A | xv |
| Ogdensburg, St. LAWRENCE CO., N.Y. | | |
| Delta deposits near; fossils near. | 242 A | xiii |
| Ogema Mg. and Smelting Co. | | |
| Capital and date of charter | 11 | vii |
| Notes on, 1892 | 235 | ii |
| silver mine, DORION TP., TH. B. D. | | |
| Galena in | 198 | ix |
| Notes on, 1892 | 235 | ii |
| Position of | 38 | R C |
| Sale of | 182 | iii |
| Ogilvie, William Morley | | |
| Member of Northwest Co. | 198 | v |
| Ref. to work by, Sudbury dist. | 16 c | xiv |
| and Hutchison. | | |
| Salt making by, at Goderich | 190 | R C |
| Ogoki lake, OGOKI RIVER, ALBANY RIVER. | | |
| Eruptive rock on, petrography .. | 209 | x |
| river, ALBANY RIVER. | | |
| Notes on, by Bell | 113 | iv |
| O'Hara—? | | |
| Estimate by, of peat in Ireland. | 189 | i |
| J. C. | 117 | ix |
| C. N. | 100 | x |
| Ohio, U. S. | | |
| Brick pavements in cities of. | 108-114 | iii |
| Clays of, for sewer-pipes. | 86 | R C |
| sources of vitrifying. | 118 | iii |
| Coal of, calorific power | 207 | ii |
| Diamonds in | 123, 124 | ix |
| Feldspar sent to, for pottery, from Frontenac co. | 21 A | xvi |
| Geological Survey of, notes by Walker | 421 | R C |
| Gypsum in | 119 | R C |
| Iron in, cost of production | 337 | R C |
| production | 168 | R C |

| | Page. | Vol. |
|--|-----------|-------|
| Ohio, U. S.—<i>Con.</i> | | |
| Shales of, analysis..... | 119, 120 | iii |
| Natural gas in..... | 151, 152 | R C |
| 115, 120, 121, 141 | | i |
| depth and pressure..... | 155 | i |
| exhaustion threatened..... | 210 | i |
| in Clinton formation..... | 98 | A xiv |
| similar to that of Kent co..... | 99 | A xvi |
| Trenton formation in..... | 42 | R C |
| depth below tide..... | 113 | A xv |
| University of..... | 17 | v |
| notes by Richards..... | 511 | R C |
| Cobalt Mining Co. | | |
| Capital and date of charter..... | 30 | A xvi |
| Oil Co. | | |
| Well of, Brooke tp., log..... | 111 | A xv |
| Paving Co. | | |
| Analysis of shale used by..... | 119 | iii |
| river, U.S. | | |
| Anticline on..... | 148 | i |
| Ohlsen—? | 85 | vi |
| Oil. | | |
| As furnace fuel..... | 395 | R C |
| 196, 203 | | ii |
| Association of, with natural gas..... | 143 | i |
| 26 | | iv |
| Athabaska Landing, Alta., boring for..... | 172 | v |
| Bounty on, aids production..... | 21 | A xv |
| Calorific power of..... | 166 | vi |
| 481 | | R C |
| Canadian, compared with that of U. S..... | 27 | v |
| exports, 1881-1887..... | 244 | R C |
| production, 1870, 1880..... | 209 | R C |
| 1886, 1887..... | 243 | R C |
| 1888..... | 525 | R C |
| Desulphurizing of..... | 27 | iv |
| Duty on, removal of..... | 24 | A xvi |
| Evidence <i>re</i> , before R. C..... | 153-167 | R C |
| Exhaustion of, certain..... | 157, 158 | i |
| Exhibited at World's Fair..... | 193 | ii |
| Findlay, Ohio..... | 121 | i |
| Flash tests of..... | 163, 164 | R C |
| Gaspé dist., Que..... | 196 | ii |
| Industry of, 1895..... | 5, 21-27 | v |
| 1899..... | 107 | ix |
| 1906..... | 23, 24 | A xvi |
| New Brunswick, production, 1906..... | 24 | A xvi |
| Notes by Goodwin..... | 220 | vi |
| Origin of..... | 164 | vi |
| 91-95 | | A xiv |
| anticlinal theory..... | 116 | i |
| notes by Ross..... | 144 | i |
| Prices, 1890..... | 158-161 | R C |
| 1895..... | 23 | v |
| 1906..... | 95 | A xvi |
| Refined and the crude equivalent, porportion..... | 21 | v |
| Report on, by Corkill..... | 88-117 | A xiv |
| Coste..... | 115-118 | A xv |
| Statistics, 1868-9..... | 140 | iv |
| 1870, 1880, 1887..... | 210 | R C |
| 1888..... | 72 | R C |
| 1891..... | 6 | i |
| 1892..... | 11 | ii |
| 1893..... | 9, 10 | iii |
| 1894..... | 11, 26-28 | iv |
| 1895..... | 11, 21-24 | v |

| | Page. | Vol. |
|-----------------------------------|----------------|--------|
| Oil. — <i>Con.</i> | | |
| Statistics.— <i>Con.</i> | | |
| 1896..... | 13, 17 | vi |
| 1897..... | 15, 17 | vii |
| 1898..... | 11, 14 | viii |
| 1899..... | 12, 13 | ix |
| 1900..... | 11, 12, 17 | x |
| 1901..... | 13, 39 | xi |
| 1902..... | 12, 13, 39, 40 | xii |
| 1903..... | 23, 24 | A xiii |
| 1904..... | 1, 3, 20 | A xiv |
| 1905..... | 1, 22, 108 | A xv |
| 1906..... | 4-6 | A xvi |
| Storing, distilling and refining. | | |
| 154-157, 163, 165 | | R C |
| Sulphuric acid, for purifying... | 193 | A xvi |
| United States, Dunkard creek, | | |
| Penn..... | 141 | i |
| production, 1888. | 525 | R C |
| quality..... | 166 | R C |
| West Virginia... | 18 | x |
| | | |
| Essex co., exploration work, | | |
| 1895..... | 18-24 | vi |
| Frontenac co., Portland tp., ex- | | |
| ploring for..... | 283 | v |
| Kent co. | | |
| Bothwell field..... | 55, 160, 161 | R C |
| production, 1905.... | 92 | A xvi |
| exploration work, 1895..... | 18-24 | vi |
| map, showing wells..... | 93 | A xvi |
| Raleigh tp..... | 26 | A xiii |
| bore-hole record..... | 111 | A xiv |
| flow ceased..... | 90 | A xiv |
| notes..... | 40-42 | xii |
| report by Knight, 1906.... | 92-104 | A xvi |
| ref. to..... | 21 | A xvi |
| Thamesville (near)..... | 42 | xii |
| Lambton co., Dawn tp..... | 18 | vii |
| Enniskillen tp. 47, 153 | | R C |
| notes by Blue..... | 178 | i |
| Manitoulin island, boring for. | 72, 73 | A xv |
| Middlesex co., Glencoe..... | 55 | R C |
| Oxford co., Beachville (near)... | 92 | B xiii |
| Big Otter Creek | | |
| valley..... | 62 | i |
| Dereham tp..... | 91 | B xiii |
| -can rapid, ABITIBI RIVER. | | |
| Gabbro on, petrography..... | 140 | A xiii |
| Notes on portage at..... | 185 | viii |
| Waterpower at..... | 193 | viii |
| creek, Ohio, I. S. | | |
| Gas and oil on..... | 141 | i |
| source of..... | 142 | i |
| Exchange, PETROLEA. | | |
| Organization of..... | 161 | R C |
| Exploration Company of | | |
| Canada. | | |
| Capital and date of charter..... | 9 | xii |
| of vitriol. See Sulphuric acid. | | |
| shales. | | |
| Collingwood, Scotland..... | 42 | R C |
| springs, ENNISKILLEN TP., | | |
| LAMBTON CO. | | |
| Oil at and near..... | 15 | viii |
| 156, 158 | | R C |
| area of field..... | 111 | A xiv |
| compared to that of Petrolea. | 24 | v |
| industry, improved, 1895.... | 5 | v |

| | Page. | Vol. |
|------------------------------------|----------|--------|
| Oil Springs. — <i>Con.</i> | | |
| Oil at and near.— <i>Con.</i> | | |
| prices, 1895..... | 23 | v |
| production, 1891-4..... | 26 | iv |
| 1893..... | 9 | iii |
| 1905..... | 108 | A xv |
| 1906..... | 24 | A xvi |
| decreasing..... | 23 | A xvi |
| refining..... | 162 | R C |
| wells, number, 1895..... | 25 | v |
| records..... | 113 | A xiv |
| Well Supply Co. | | |
| Output by, 1893..... | 118 | ii |
| Oiseau bay, L. SUPERIOR, TH. B. D. | | |
| Description of shores at and near. | 135 | viii |
| Ojanperci, John..... | 35 | A xvi |
| Ojibway Indians. | | |
| Condition of, compared to more | | |
| northern Indians..... | 179 | A xiii |
| Hinterland, The..... | 134 | iv |
| Michipicoten div., notes by J. M. | | |
| Bell..... | 298 | A xiv |
| Photo of, in costume..... | 176, 177 | A xiii |
| Rainy Lake dist., notes by Cole- | | |
| man..... | 97, 98 | iv |
| Oka (PICKEREL) river, W. OF MICH- | | |
| PICOTEN, ALG. | | |
| Iron ore on..... | 23 | R C |
| O'Keeffe, J. | | |
| Notes by, on peat industry in Ire- | | |
| land..... | 189 | i |
| Michael | | |
| Evidence by, before R. C..... | 125 | R C |
| ref. to..... | 65 | ii |
| Olary, S. AUSTRALIA. | | |
| Cobalt ore near..... | 70 | B xiv |
| Old Chap Mining Co. | | |
| Capital and date of charter..... | 30 | A xvi |
| Fort island, L. OF THE WOODS. | | |
| See Miller island. | | |
| Green lake, S. E. ALG. | | |
| Burned country near, photo. 160, | 161 | xii |
| Description of..... | 167 | xii |
| Hill iron mine, SALISBURY | | |
| DIST., CONN..... | 346 | R C |
| Red Sandstone. See Devon- | | |
| ian. | | |
| Woman river, BRULÉ BAY, | | |
| L. SUPERIOR. | | |
| Beaches on and near..... | 193 | A xv |
| altitude..... | 194 | A xv |
| photos..... | 195 | A xv |
| Character of..... | 176 | A xv |
| Keweenaw formation on..... | 189 | A xv |
| Minor ref. to..... | 179 | A xv |
| Olden station, OLDEN TP., FRONT- | | |
| ENAC CO. | | |
| Corundum-bearing rocks near.... | 227 | viii |
| tp., FRONTENAC CO. | | |
| Crystalline limestone in..... | 45 | ii |
| Iron ore in..... | 54 | A xiii |
| mining..... | 276 | v |
| Marl in..... | 46 | B xiii |
| Pyrrhotite in..... | 207 | ix |
| 200 | | A xv |
| Quartz from, mill test on..... | 215 | v |
| Silver in..... | 209 | ix |
| Zinc mining in..... | 25 | xii |
| See also Richardson zinc m. | | |

| | Page. | Vol. | | Page. | Vol. |
|--|----------------------|--------|--|----------------|--------|
| Oldenburg, GERMANY. | | | Omeemee (Pigeon) rapid, MAT- | | |
| Peat in..... | 212, 213 | ii | TAGAMI RIVER, ALG..... | 127 | ix |
| plant..... | 29 | A xiii | ON 3 copper loc., SHEBANDOWAN | | |
| used for sanitation..... | 216 | ii | LAKE, TH. B. D. | | |
| on railways..... | 202 | i | Notes on, by Coleman..... | 80 | v |
| Oleson, John..... | 39, 41 | A xiii | Onakawana river, ABITIBI RIVER. | | |
| Oligoclase. | | | Notes on, by Parks..... | 189 | vii |
| Definition of..... | 538 | R C | Onderdonk, Henry..... | 48, 111 | B xiii |
| Lanark..... | 194 | ii | Onaping, DOWLING TP., ALG. | | |
| Olinda, GOSFIELD TP., ESSEX CO. | | | Beaches near, altitude..... | 103 | C xiv |
| Blast furnaces at, 1831..... | 23 | ii | Rocks at and near: | | |
| Oliphant, W. H..... | 137 | xii | analysis..... | 116, 117 | C xiv |
| | 102 | A xv | gabbro, petrography..... | 294 | xii |
| Olive Gold Co. | | | gneiss, photo..... | 66 | C xiv |
| Capital and date of charter..... | 9 | viii | granite..... | 68 | i |
| <i>See also next ref.</i> | | | nickel-eruptive..... | 197 | A xiii |
| gold mine, N. OF BAD VER- | | | | 64 | C xiv |
| MILION LAKE, R. R. D. | | | analysis..... | 212, 213 | A xiii |
| Accident at..... | 31-33 | vii | petrography..... | 210 | A xiii |
| Conglomerate near..... | 134 | xi | norites..... | 3, 114 | C xiv |
| Depth of, 1900..... | 34 | ix | petrography..... | 109-111 | C xiv |
| Felsite schists near..... | 82, 262 | viii | syenitic..... | 110 | C xiv |
| Minor ref. to..... | | | vitrophyre tuff..... | 68 | C xiv |
| Notes on, 1897..... | 31-33, 128 | vii | analysis..... | 132 | C xiv |
| 1898..... | 46, 79, 80, 272, 278 | viii | creek, MONCRIEFF TP., ALG. | | |
| 1899..... | 72-74 | ix | Granite on..... | 222 | A xiii |
| 1900..... | 38, 80, 81, 94 | x | falls, ONAPING RIVER, ALG. | | |
| Photos of..... | 96, 97 | ix | Galena and zinc-blende on..... | 91 | i |
| Shut down, 1900..... | 37 | x | Gold Co. | | |
| Oliver, George | | | Capital and date of charter..... | 9 | viii |
| Iron mining by, N. Crosby tp. 44, 50 | ii | | Sluicing plant of, photos.... | 160, 161 | x |
| John. See Vermilion Gold Mfg. | | | Work by, 1900..... | 157, 158 | x |
| Co..... | 113 | R C | lakes (LOWER AND UPPER), | | |
| Oliver, Thomas..... | 25 | A xiv | ONAPING RIVER, ALG. | | |
| | 30-33 | A xv | Altitude of..... | 156 | x |
| and Roberts Wire Co..... | 370 | R C | Gold on and near..... | 187 | x |
| | 120 | ii | alluvial..... | 258 | vii |
| Bros. and Phillips..... | 370 | R C | | 157 | x |
| Ferry. See MacCne. | | | | 17, 201 | xi |
| Iron and Steel Co..... | 120 | ii | H. B. C. post between, and Long | | |
| pyrites mine, HUNGERFORD | | | Lake..... | 156 | x |
| TP., HASTINGS CO. | | | Jasper on..... | 187 | x |
| Notes on, 1906..... | 80 | A xvi | Lumber dam on..... | 154 | x |
| and photo..... | 158-159 | A xvi | Notes on, by Bell..... | 76 | i |
| tp., TH. B. D. | | | Rocks on..... | 154 | x |
| Magnesite in. <i>See</i> Murillo sta.... | 209 | xii | | 222 | A xiii |
| Road from, to Whitefish lake.... | 9 | vi | arkose..... | 74 | i |
| Olivine. See Chrysolite. | | | jasper conglomerate..... | 187 | x |
| diabase. See Diabase, olivine | | | river, VERMILION RIVER, ALG. | | |
| Ollman, M..... | 106 | B xv | Falls on, photo..... | 6 | C xiv |
| Ollmann, Mrs. H..... | 29 | xii | Glaciation near..... | 102 | C xiv |
| Olson, John..... | 42-50 | x | gravel plains..... | 65, 106 | C xiv |
| Olympia gold mine, M11 Loc., | | | Log jam and log chute on, photo. | | |
| L. OF THE WOODS. | | | | 224, 225 | A xiii |
| Mill erected at..... | 60 | A xvi | Rocks on and near..... | 197 | A xiii |
| Minor ref..... | 34 | A xiv | | 64 | C xiv |
| Work by, 1902..... | 95 | xii | breccia..... | 86 | i |
| 1903..... | 61 | A xiii | tuff, notes..... | 10, 39, 86, 94 | C xiv |
| 1906..... | 60 | A xvi | petrography..... | 131, 132 | iv |
| Olympia Gold Mfg. Co. | | | pyritous..... | 95, 131 | C xiv |
| Capital and date of charter..... | 31 | A xvi | O'Neal, Cornelius..... | 129 | i |
| Work by, Shoal Lake dist..... | 59 | A xv | John..... | 224 | i |
| <i>See also last ref.</i> | | | | 48 | iii |
| O'Mara, Patrick | | | Onea lake, RUSSIA. | | |
| Mica mining by, S. Burgess tp. 195 | iii | | Schungite from, analysis.... | 165, 166 | vi |
| Ombabika river, NIPIGON LAKE, | | | Oneida, ONEIDA TP., HALDIMAND CO. | | |
| TH. B. D. | | | Gypsum at, analysis..... | 56 | B xiii |
| Notes on, by Bell..... | 202 | v | | | |

| | Page. | Vol. | | Page. | Vol. |
|---|----------|--------|--|----------|--------|
| Oneida tp., HALDIMAND CO. | | | Ontario.—<i>Con.</i> | | |
| Gypsum mining in..... | 112,113 | i | Climate of, compared with Den- | | |
| 24 | x | | mark and Sweden. 197 | xii | |
| evidence before R. C..... | 122 | R C | favourable for peat-bogs. 202 | xii | |
| <i>See also</i> Garland mine. | | | Copper ranges of, report by Cole- | | |
| Martindale mine. | | | man.....112-191 | ix | |
| Limestone from, analysis..... | 15,16 | B xiii | Divisions of, explanation..... | 218 | vii |
| Travertine in..... | 211 | x | Dominion Survey's operations | | |
| crystalline..... | 91 | B xiii | in, scanty..... | 408 | R C |
| O'Neil, John | 132 | x | Fossils in, list of marine..... | 224-227 | x |
| O'Neill, C. H. | 92 | vii | Fuel supply of..... | 203,204 | ii |
| 88 | x | | Garnets in, of doubtful value.... | 188 | ii |
| Onions, Peter (1783) | 359 | R C | Gas regions of, report by Stiff. 42-45 | xi | |
| Onions. | | | Geographical position of..... | 101 | iv |
| Mentioned as growing at:— | | | Geology of, associated with its | | |
| Abitibi dist., Fort Matache- | | | history..... | 185 | ii |
| wan..... | 240 | A xiv | evidence before R.C. 52-70 | R C | |
| New Post..... | 186 | viii | paper by Bell..... | 1-52 | R C |
| Night-hawk lake..... | 123 | A xii | Geological Survey for, necessary. 424 | R C | |
| Redstone river..... | 107 | A xiii | Gold-fields of, notes by Blue.... | 8 | v |
| Goulais River valley..... | 197 | viii | paper by Blue..... | 11-61 | iii |
| Rainy river..... | 163 | v | <i>See also</i> Inspector of Mines | | |
| <i>Onoclea sensibilis.</i> | | | Highest land in (Tip-top mt.)... 142 | viii | |
| Abitibi Lake dist..... | 242 | A xiv | photo (mt. Sinclair) 176-177 | vii | |
| Mattagami valley..... | 151 | A xv | Iron ores of..... | 31-82 | ii |
| Onondaga, U. S. | | | titaniferous..... | 233 | vii |
| Onondaga formation named | | | making in, cost compared | | |
| after..... | 44,45 | R C | with Michi- | | |
| Salt springs at..... | 14 | i | gan..... | 103 | ii |
| formation. | | | prospects..... | 28-32 | iv |
| Composition of..... | 98 | A xiv | 33, 34 | x | |
| Distribution and character, notes | | | ranges in, extent..... | 200, 201 | x |
| by Bell..... | 45 | R C | report by Coleman... 142-191 | ix | |
| occurrences..... | 24 | B xiii | 128-151 | xi | |
| Gypsum in..... | 119 | R C | Miller..... | 304-317 | xii |
| 170,177 | i | | Limestones of, report by Miller. Pt. B. xiii | | |
| 147,148 | xii | | Lumbering in, chief localities... 119 | iv | |
| Position of, in Silurian..... | 2 | R C | Maps of, geological index... 203, 204 | R C | |
| Rocks in, for hydraulic cement.. 15 | B xiii | | 23 | B xiii | |
| Salt in..... | 170, 177 | i | pyrites deposits. 151 | A xvi | |
| | | | southern..... | 23 | B xiii |
| | | | Metals of, names and occur- | | |
| | | | ences..... | 190-193 | ii |
| Brant co..... | 33 | B xiii | Mineral exports, 1874, 1886... 238 | R C | |
| Bruce co..... | 35 | B xiii | statistics. <i>See</i> opening | | |
| Essex co..... | 115 | A xiv | pages of each annual | | |
| Grand river, gypsum in..... | 110 | i | report. | | |
| Haldimand co..... | 51 | B xiii | resources, report by R.C. Vol. R C | | |
| Kent co., E. Tilbury tp., thick- | | | Minerals of, paper by Miller. 193-212 | ix | |
| ness..... | 103 | A xvi | Mining laws of, compared to | | |
| Lambton co., Petrolea, thickness. 96 | A xiv | | those of British Columbia... 4, 5 | vii | |
| Waterloo co..... | 115 | B xiii | paper by Blue 225-229 | ix | |
| Welland co..... | 116,117 | B xiii | Mining schools in, description. | | |
| Wellington co..... | 120,122 | B xiii | 193-198 | vi | |
| tp., BRANT CO. | | | locations for. 420 | R C | |
| Mineral water in. <i>See</i> Tuscarora. | | | Oil of, compared with that of | | |
| Ontario. | | | U.S..... | 27 | v |
| Area of..... | 101 | iv | Peat areas of..... | 197, 209 | ii |
| 182 | A xvi | | Population of, 1901..... | 192 | xii |
| Arsenic in, paper by Wells... 101-122 | xi | | families, 1890..... | 180 | i |
| At the Pan-American Exhbtn., | | | Pyrrhotite occurrences in..... | 207 | ix |
| report by Speller..... | 83-90 | xi | 200 | A xvi | |
| Beaches (marine) of Eastern, re- | | | Rocks of, Archaean..... | 245 | v |
| port by Coleman..... | 215-227 | x | Huronian..... | 182-186 | ix |
| Boundaries of (1890)..... | 1 | R C | Laurentian, paper by | | |
| disputes <i>re.</i> | 191,192 | v | Bell..... | 245, 249 | v |
| Bricks of, compared with U.S.... 129 | iii | | petrography..... | 179, 182 | ix |
| Clays of, notes by Gibson.... 125-132 | iii | | trap, distribution..... | 15 | v |
| report by Baker..... | Pt. B xv | | Seaside of, paper by Gibson... 128-30 | iv | |

| | Page. | Vol. |
|--|------------------|------|
| Ontario. — <i>Con.</i> | | |
| Settling in, as farmers, advantages of..... | 136, 137 | iv |
| Silver mining by Govt. of. <i>See</i> Gillies limit. | | |
| Sulphur in mineral-bearing rocks of..... | 22 A | xvi |
| Waterpowers of, act respecting. | 253-256 | vii |
| paper by Gibson. | 251-253 | vii |
| and California Oil Co. | | |
| Capital and date of charter..... | 11 | xi |
| and Rainy River R'y. | | |
| Notes on route and power of. | 133, 134 | v |
| Bank. | | |
| Iron claim owned by, Lutterworth tp..... | 52, 56 | x |
| Boulder Gold Mg. Co. <i>See</i> Boulder Gold Mg. Co. | | |
| Bureau of Mines. <i>See</i> Bureau of Mines. | | |
| Co. | | |
| Limestone in, notes by Miller... | 89 B | xiii |
| Cobalt Development Co. | | |
| Capital and date of charter..... | 26 A | xv |
| Colorado Mg. Co. | | |
| Work by, Spider lake..... | 94 A | xiii |
| Copper Co. | | |
| Eldorado mine worked by..... | 76 A | xvi |
| Corundum Co. | | |
| Capital and incorporation..... | 9 | xii |
| Name of, changed..... | 19 A | xiv |
| | 99 A | xv |
| Operating, 1902..... | 37, 135 | xii |
| 1903..... | 19, 21, 89, 90 A | xiii |
| Plant of, destroyed by fire..... | 75 A | xiv |
| photos..... | 112, 113 A | xiii |
| Succeeded by Ashland Emery & Corundum Co..... | 19 B | xv |
| Crude Oil Co. | | |
| Capital and date of charter..... | 24 A | xiii |
| Gas and Fuel Co. | | |
| Exhibits of, at Buffalo..... | 25 A | xv |
| Gold Concessions, Ltd. | | |
| Capital of..... | 10 | viii |
| Work by, 1897..... | 55 | vii |
| 1898..... | 84-87 | viii |
| 1899..... | 47, 48 | ix |
| Gold Fields Mg. and Development Co. | | |
| Capital and date of charter..... | 11 | vii |
| Gold Mining Co. | | |
| Formation of..... | 159 | v |
| Owning Foley mine..... | 5 Bull. | i |
| | 81 | vi |
| Government Gold Concessions. | | |
| Formation of, and directors..... | 9 | vi |
| Graphite Co. | | |
| Capital and date of charter..... | 11 | xi |
| officers..... | 31 | v |
| Exhibit of, at Pan-American Ex. | 87 | |
| Operating Black Diamond mine. | 25 A | xvi |
| Notes on..... | 37 | vi |
| Purchase by, of boring plant.... | 42 A | xiii |
| <i>See also</i> Whitefish lake. | | |
| graphite mine. <i>See</i> Black Donald graphite mine. | | |

| | Page. | Vol. |
|--|-----------|------|
| Ontario Joint Stock Phosphate Mg. Co. | | |
| Capital and date of charter..... | 11 | vii |
| Lead and Zinc Co. | | |
| Work by, 1902..... | 87 A | xiii |
| Limited gold mine, L. OF THE WOODS. | | |
| Idle, 1898..... | 280 | viii |
| Notes on..... | 53, 54 | vii |
| | 68, 276 | viii |
| Lithographic Stone and Mg. Co. | | |
| Capital and date of charter..... | 12 | vii |
| Mineral Lands Co. | | |
| Formation of..... | 140, 141 | vi |
| Prospecting by, for copper, Pt. Mamainse..... | 130 | ii |
| Purchase by, of land from Montreal Mg. Co..... | 69 | iii |
| Sale of lands of..... | 153 | vi |
| Work by, Silver Islet mine..... | 35 | R C |
| | 141 | vi |
| Mines Development Co. | | |
| Capital and date of charter..... | 11 | vii |
| Mining and Smelting Co. | | |
| Lead mining by, Bannockburn... | 11 A | xiii |
| | 39, 79 A | xiv |
| | 16 A | xv |
| Mg. and Mfg. Co. | | |
| Capital and date of charter..... | 11 | vii |
| Mining Co. | | |
| Capital and date of charter..... | 10 | x |
| | 11 | xi |
| Gold mining by, L. of the Woods. | 118 | R C |
| | 233 | ii |
| | 14 | iii |
| Natural Gas Co. | | |
| Boring by, for oil, Gosfield tp... | 25 | vi |
| Dispute with Kingsville villagers. | 117, 123 | i |
| Merged in Natural Gas and Oil Co..... | 28 | v |
| Nickel Co. | | |
| Capital and date of charter..... | 30 A | xvi |
| Work by, 1906..... | 67 A | xvi |
| Nickel Mountain Mg. Co. | | |
| Capital and date of charter..... | 11 | vii |
| Oil and Gas Co. | | |
| Capital and date of charter..... | 31 A | xvi |
| Oil and Refining Co. | | |
| Capital and date of charter..... | 30 A | xvi |
| Paving Brick Co. | | |
| Analysis of clay used by..... | 8 B | xv |
| Hudson River shales used by... | 7 B | xv |
| Minor ref. to..... | 15 A | xiii |
| Plant of, description..... | 16 | v |
| Work by, for Toronto streets... | 14 | vi |
| notes and photos.. | 112-114 B | xv |
| Peat Fuel Co. | | |
| Work by, Welland co..... | 33 | iv |
| People's Salt and Soda Co. | | |
| Producing, 1899..... | 111 | ix |
| 1902..... | 38 | xii |
| 1903..... | 22 A | xiii |
| 1905..... | 21 A | xv |
| 1906..... | 23 A | xvi |
| People's Salt Manufacturing Co. | | |
| Evidence re before R. C..... | 189 | R C |

| | Page. | Vol. | | Page. | Vol. |
|--|----------|------|--|-----------------|------|
| Ontario Portland Cement Co. | | | Onwatin lake, CAPREOL TP., NIP. | | |
| Capital and date of charter..... | 11 | xi | Gravel and sand on | 5 c | xiv |
| Clay and marl used by, analysis..... | 159 A | xiv | Iron pyrites on | 204 A | xiii |
| Notes on, 1902..... | 33, 149 | xii | Nickel prospecting on | 75 c | xiv |
| 1905..... | 151 A | xiv | Rocks on and near :- | | |
| Officers of | 18 B | xiii | diabase dike..... | 203 A | xiii |
| Operating, 1904..... | 18 A | xiv | slate, black..... | 73 c | xiv |
| 1905..... | 17 A | xv | notes..... | 10, 95, 96 c | xiv |
| 1906..... | 20 A | xvi | petrography | 133 c | xiv |
| Plant of | 18 B | xiii | Shores of, character..... | 6 c | xiv |
| capacity | 17 A | xiii | Terraces near..... | 103, 106 c | xiv |
| Property on Blue lake acquired by | 34 B | xiii | Oolite. | | |
| Prospectors Mg. and Dev. Co. | | | Definition of..... | 538 | R C |
| Capital and date of charter..... | 11 | vii | Opal. | | |
| Stella mines owned by..... | 33, 113 | vii | Apatite dists..... | 442 | R C |
| Work by, L. of the Woods, 1897..... | 38 | vii | Definition of..... | 539 | R C |
| Quebec Cobalt Mg. Co. | | | Opasatika lake, OPASATIKA RIVER, ALG. | | |
| Capital and date of charter..... | 28 A | xvi | Character of..... | 144 A | xiii |
| Reefs Mg. and Development Co. | | | Diabase from, to Missinabi river..... | 181 A | xvi |
| Capital and date of charter..... | 11 | vii | Dimensions of | 135 A | xiii |
| Rolling Mill Co. | | | Iron ore on | 23 | R C |
| Bounty payments to, 1900 | 33 | x | pyrites | 256 | v |
| Merged in Hamilton Steel and Iron Co..... | 14 | ix | Pine on | 119 | iv |
| Sewer Pipe Co. | | | (Long) lake, PONTIAC CO., QUE. | | |
| Capital and date of charter..... | 30 A | xvi | Iron ore on | 228, 230 | xi |
| Minor ref. to..... | 15 A | xiii | river, MISSINABI RIVER, ALG. | | |
| Operating, 1906 | 19 A | xvi | Description of, by J. M. Bell..... | 135, 136 A | xiii |
| Plant of, at Mimico | 29 A | xiii | Falls on, photo | 176, 177 A | xiii |
| notes..... | 117 B | xv | Forest fires on | 256 | v |
| photo..... | 118 B | xv | Iron ore on, map showing..... | 153 A | xiii |
| Silver and Antimony Mg. Co. | | | notes..... | 150-152 A | xiii |
| Capital and date of charter..... | 11 | vii | pyrites..... | 149, 150, 181 A | xvi |
| Silver Plating Co. | | | Lignite on, notes by J. M. Bell..... | 162, 161 A | xiii |
| Notes on, 1890..... | 131 | i | Rocks on..... | 138, 140 A | xiii |
| Smelters, Ltd. | | | Timber on..... | 176, 177 A | xiii |
| Exhibits of, at Pan-American Ex..... | 25 A | xv | Opeepesway lake. | 317 | xii |
| Smelting Works, Ltd. | | | Ophiolite. See Serpentine. | | |
| Accident at works of | 44 | xii | Ophir gold mine, ICKTA LAKE, GAL-BRAITH TP., ALG. | | |
| Canadian Copper Co.'s matte treated by | 19 | xii | Accident at | 200-206 | iv |
| Copper prospecting by, near Massey | 37 | x | Beach at | 152, 153 | viii |
| Operations commenced by, 1901..... | 19, 21 | xi | Diorite in | 40 | iv |
| Works of, burnt..... | 6 A | xiii | Financial difficulties affect | 3 | iv |
| erected..... | 69 A | xiv | Notes on, 1894..... | 231-233 | iv |
| notes on, 1901..... | 141 C | xiv | 1890..... | 89, 90 | ix |
| 1902..... | 140 C | xiv | 1902..... | 80, 81 | xii |
| 1903..... | 121 | xii | by Blue | 37-44 | iii |
| photo..... | 84 A | xiii | Nuggets from | 236 | ii |
| Terra-cotta and Pressed Brick Co. | 272, 273 | xi | Photo of, showing vein in bluff..... | 37 | iv |
| Notes on | 103, 104 | i | Promising well | 41 | iii |
| Victoria Mining Co. | | | Purchased by a Duluth syn..... | 192 | ii |
| Capital and date of charter..... | 10 | ix | Quartz of, character..... | 9 | ii |
| Ontonagan dist., Mich. | | | Section of | 36 | iv |
| Copper deposits of..... | 85 | iii | showing veins | 206 | iv |
| river, Mich. | | | Worked for iron, 1901..... | 44 | iii |
| Copper on, early knowledge..... | 110 | v | Jack gold mine, SULTANA ISLAND, L. OF THE WOODS. | 23 | xi |
| prospecting | 93 | R C | Character of vein | 109 | R C |
| | | | Notes on, by Blue | 14, 15 | iii |
| | | | Coleman | 68 | iv |
| | | | Rocks in | 116, 123 | vi |
| | | | Mines Development Co. | | |
| | | | Capital and date of charter..... | 10 | ix |

| | Page. | Vol. | | Page. | Vol. |
|---|----------|------|---|-----------|------|
| Ophir Mining Co. | | | "Oregon" ss. | | |
| Gold on land of, discovery..... | 122 | iv | Armour of..... | 149 | iii |
| Formation of..... | 43, 44 | iii | O'Reilly, T. | | |
| Opimicon bay, KESAGAMI LAKE, NIP. | | | Brick-yard of, Ottawa..... | 61 B | xv |
| Peat near, depth of..... | 148 A | xiii | Orekhkova, NIGNI-NOVGOROD PROV., RUSSIA. | | |
| Opinico (Rock Lake) apatite mine, STORRINGTON TP., FRONTENAC CO. | | | Peat near..... | 217 | ii |
| Notes on, 1891..... | 239 | i | Orel prov., RUSSIA. | | |
| 1892..... | 250 | ii | Peat in..... | 217, 218 | ii |
| Mining Co. | | | Orford Copper Co. | | |
| Capital and date of charter..... | 11 | vii | Absorbed by International Nickel Co..... | 172 C | xiv |
| Opishinguquaquaya lake, KAMISKOTANA LAKE, SAGAMON RIVER, ALG. | | | Exhibit of, at Pan-American Ex..... | 86 | xi |
| Alg..... | 130 | ix | Methods of, improved..... | 179 | iv |
| Ops tp., VICTORIA CO. | | | Monopoly of..... | 59 A | xiii |
| Artesian wells in. See Lindsay. | | | Nickel refinery of, Constable Hook, N.J..... | 131 | ii |
| Limestone in..... | 113 B | xiii | | 170 C | xiv |
| Optic lake, NIP. | | | Nickel refining process of..... | 218-221 | ix |
| <i>Opuntia fragilis.</i> | | | Palladium production by..... | 8 A | xiv |
| Lake of the Woods and Rainy lake..... | 96 | iv | Prices charged by..... | 11 A | xvi |
| | 51 | v | Sales by, to U.S. navy..... | 138 | ii |
| Orange co., N.Y. | | | Smelter of, Copper Cliff..... | 125 | x |
| Corundum in..... | 240 | viii | | 64, 280 | xi |
| Hall, HAILEYBURY, NIP. | | | for Cobalt ores..... | 140 C | xiv |
| | 40 A | xiv | | 64 A | xv |
| Hall, NEW LISKEARD, NIP. | | | Smelter proposed by, Georgian bay..... | 261 | viii |
| river, S. AFRICA. | 43 A | xv | Sudbury ores refined by..... | 27 | vii |
| Diamonds in..... | 41 A | xiv | tp., KENT CO. | | |
| Orangeville, GARAFRAXA TP., DUFFERIN CO. | | | Gas in..... | 29 | v |
| Brick-yard at..... | 122 | ix | bore-hole records..... | 123, 124 | i |
| Cement works at:— | | | Oil in, boring for..... | 5 | v |
| See Orangeville Cement Co. | | | | 18-21 | vi |
| Superior Portland Cement Co. | | | Salt in, depth and thickness..... | 33 | vi |
| Guelph formation at..... | 121 B | xiii | tp., SHERBROOKE CO., QUE. | | |
| Limestone quarrying at..... | 99 | i | Millerite in..... | 213 | vi |
| | 39 B | xiii | | 59 B | xiv |
| Sandstone quarrying near. See Mono tp. | | | Original Swede Boys' Prosp'g Co. | | |
| Cement Co. | | | See also Swede Boys' gold mine. | | |
| Formation: analysis of marl and clay to be used by..... | 16 A | x | Capital and date of charter..... | 11 | vii |
| Orassi, Eugene. | | | Photo of sluices of..... | 112, 113, | vi |
| <i>Orbuloides.</i> | 34, 35 A | xvi | Orillia, ORILLIA TP., SIMCOE CO. | | |
| Anderdon tp..... | 125 | xi | Artesian water in..... | 59 | i |
| <i>Orchis rotundifolia.</i> | | | Brick-clay in, analysis..... | 18 B | xv |
| Mattagami valley..... | 150 A | xv | Waterpower at..... | 14 A | xv |
| Orconerara Iron Co. | | | Wolframite near..... | 212 | ix |
| | 121 | ii | tp., SIMCOE CO. | | |
| Orde, F. W. | | | Limestone in..... | 89 B | xiii |
| | 118 | vii | Oriole Gold Co. | | |
| Orde Brown, Capt. | | | Capital and date of charter..... | 11 | vii |
| Authority on armour plates..... | 160, 162 | iii | Orion gold mine, S. W. OF CARLETON LAKE, MANITOU LAKE REG., R.R.D. | | |
| Compound armour plates advocated by..... | 153, 154 | iii | Notes on, 1899..... | 62 | ix |
| Ordinance. See Guns. | | | Orion Gold Mining Co. | | |
| Ordovician. See Cambro-Silurian. | | | Capital and date of charter..... | 10 | ix |
| Ores. | | | officers..... | 62 | ix |
| Copper, Canadian exports, 1881-1887..... | 244 | R C | Mining Co. | | |
| Smelting of, paper on..... | 374-377 | R C | Capital and date of char er..... | 24 A | xiii |
| Ore Contracting Co. | | | Oriskany formation (DEVONIAN). | | |
| Capital and date of charter..... | 28 A | xvi | Composition of..... | 98 A | xiv |
| Oregon, U.S. | | | Grindstones made from..... | 54 B | xiii |
| Mining laws of, notes by R.C..... | 283 | R C | Haldimand co..... | 53-56 B | xiii |
| Nickel in..... | 146 C | xiv | Hagersville..... | 145, 146 | xii |
| character..... | 44 | vi | Niagara river, near..... | 46 | R C |
| genthite..... | 148 C | xiv | Oil in..... | 114 A | xiv |
| Platinum in..... | 142 | vii | Springvale, fossils from..... | 144 | xii |
| | | | Thickness of, in oil-fields..... | 96 A | xiv |
| | | | Wainfleet tp..... | 119 B | xiii |

| | Page. | Vol. | | Page. | Vol. |
|--|------------|------|--|----------------|------|
| Ormond corner, WINCHESTER TP., DUNDAS CO. | | | Orthoclase.—<i>Com.</i> | | |
| Limestone at..... | 40 B | xiii | Sebastopol tp..... | 188 | ii |
| Calcareous..... | 47 B | xiii | Specific gravity of..... | 205 | ix |
| Ornamental stones. | | | | 202 | vi |
| See also Building stones. | | | Orthose. | | |
| Bruce Mines, north of..... | 72 | i | Ilmen mts., Russia, with corundum..... | 213 | vii |
| Lamorandiere bay..... | 93 | i | Orthothutes. | | |
| White-beaver lake..... | 93 | i | Anderdon tp..... | 126 | xi |
| Orpiment, (YELLOW SULPHIDE OF ARSENIC). | | | Orton, Prof. Edward | | |
| Carrying arsenic..... | 101 | xi | Head of ceramics dept., Ohio University..... | 17 | v |
| Description of..... | 221 | vi | Notes by, on clay for paving bricks..... | 114-118 | iii |
| Hardness and specific gravity of..... | 201 | vi | gas in Ohio..... | 120 | i |
| Orr, James A. Bros. | 220 | iv | origin..... | 142-145 | i |
| Views of, <i>re</i> gas fuel..... | 19 | x | | 93-96 A | xiv |
| Orser, Sidney | 134 | x | Notes by, on gas, uses..... | 159 | i |
| | 90 A | xvi | Seger cones..... | 40 B | xv |
| Orthis livia. | | | Ref. to work by, oil and gas, Ohio..... | 151 | rc |
| Anderdon tp..... | 125 | xi | | 115, 116, 130, | i |
| " (<i>Rhipidomella</i>) <i>livia</i> . | | | | 108 A | xiv |
| Port Colborne, near..... | 35 | xi | iron mine, HASTINGS DIST. | | |
| St. Marys, near..... | 96 B | xiii | Rocks of..... | 57 | ii |
| St. Marys river..... | 151 | xii | Orwell, YARMOUTH TP., ELGIN CO. | | |
| " <i>lym.</i> | | | Brick-yards in, notes..... | 62 B | xv |
| Gore Bay..... | 77 B | xiii | clay for, analysis..... | 14 B | xv |
| Orthite. See Allanite. | | | Orgzopsis asperifolia. | | |
| Orthoceras. | | | Ottawa, near..... | 225 | x |
| Abitibi river..... | 187, 188 | viii | Osaquam (OSAKWAN), W. OF | | |
| Anderdon tp..... | 125 | xi | IGNACE, R.R.D. | | |
| Gore Bay..... | 77 B | xiii | Country north of, character..... | 147 | xi |
| Kwataboahagan river..... | 189 A | xiii | Osawabik Mining Co. | | |
| diagram..... | 192, 193 A | xiii | Capital and date of charter..... | 11 | xi |
| Port Colborne, near..... | 36 | xi | Osborne, Chase S. | | |
| St. Marys..... | 152 | xii | Mining by, Michipicoten div..... | 105 | viii |
| " <i>algomense.</i> | | | | 117 | ix |
| Kwataboahagan river..... | 189 A | xiii | | 143 | x |
| diagram..... | 192, 193 A | xiii | Moose mt..... | 21, 299 | xii |
| " <i>extremum.</i> | | | | 216 A | xiii |
| Kwataboahagan river..... | 189 A | xiii | | 103 C | xiv |
| diagram..... | 192, 193 A | xiii | H..... | 66 | xii |
| " <i>lurum.</i> | | | Oil Producers, Ltd. | | |
| Kwataboahagan river..... | 189 A | xiii | Exhibits of, at Buffalo..... | 25A | xv |
| photo, in limestone..... | 192, 193 A | xiii | Oschekkamega Indians. | | |
| " <i>pelops.</i> | | | Cannibalism among..... | 138 | v |
| Kwataboahagan river..... | 189 A | xiii | Oshawa, WHITEBY TP., ONTARIO CO. | | |
| " <i>puleher.</i> | | | Iron works at..... | 329 | rc |
| Kwataboahagan river..... | 189 A | xiii | Limestone at..... | 41, 89 B | xiii |
| diagram..... | 192, 193 A | xiii | Oshawong, WANAPITEI RIVER, NIP. | | |
| " <i>procerus.</i> | | | Huronian quartzite on..... | 155 | x |
| Kwataboahagan river, photo of, in limestone..... | 192, 193 A | xiii | Osinawe lake, SEINE RIVER, ONT. | | |
| " <i>thoas.</i> | | | Gold on..... | 58 | iv |
| Kwataboahagan river..... | 189 A | xiii | mining..... | 74, | vi |
| Orthoclase. | | | | 111 | rc |
| Apatite dists..... | 442 | rc | Osler,—? | | |
| Bathurst tp..... | 205 | ix | <i>Osmicus no dar.</i> | | |
| Burgess, N. tp..... | 205 | ix | Greens creek, Ottawa..... | 221 | x |
| Composition of..... | 224 | vi | Osmiridium (IRIDOSMINE). | | |
| Crosby tp..... | 205 | ix | British Columbia..... | 8 A | xiv |
| Definition of..... | 539 | rc | <i>Osmorrhiza brevistylis.</i> | | |
| Description of..... | 224 | vi | Abitibi dist..... | 241 A | xiv |
| Hardness of..... | 202 | vi | Mattagami valley..... | 150 A | xv |
| | 214 | vii | <i>Osmunda cinnamomea.</i> | | |
| Kingston dist., containing feldspar for pottery..... | 205 | ix | Mattagami valley..... | 151 A | xv |
| | | | " <i>regalis.</i> | | |
| | | | Abitibi Lake dist..... | 242 A | xiv |
| | | | Mattagami valley..... | 151 A | xv |
| | | | Moose River basin..... | 177 A | xiii |

| | Page. | Vol. |
|---|---------------|--------|
| Osnabruck Centre, OSNABRUCK TP., | | |
| STORMONT CO. | | |
| Marine deposits near | 220 | x |
| tp., STORMONT CO. | | |
| Marine deposits in. <i>See</i> Gallin- | | |
| gertown. | | |
| Peat in | 190 | i |
| | 198 | ii |
| <i>See also</i> Newington. | | |
| Oso tp., FRONTENAC CO. | | |
| Apatite in | 172, 439 | R C |
| | 194 | ix |
| Barytes in | 53 | R C |
| Corundum in | 205, 227, 228 | viii |
| Feldspar prospecting in | 81, 83 | A xiv |
| Gold prospecting in | 265 | v |
| Igneous rocks in | 225 | viii |
| Iron ore in | 37, 46 | ii |
| mining | 275, 276 | v |
| Limestone in, crystalline | 45 | ii |
| Quartz from, mill test on | 214 | v |
| Osprey tp., GREY CO. | | |
| Niagara formation in | 44 | R C |
| Oil well in, log | 109, 114 | A xv |
| Trenton formation in, height | | |
| above tide level | 113 | A xv |
| Ostandigistagan falls, GROUND- | | |
| HOG RIVER, ALG. | 132, 142 | ix |
| Oster island, L. TIMISKAMING, QUE. | | |
| Rocks on | 86, 87 | B xiii |
| Osterholz, GERMANY. | | |
| Moss litter at, experiments on .. | 141 | iii |
| O'Sullivan, Henry | | |
| Notes by, on country E. of Moose | | |
| River basin | 204 | v |
| Otago, NEW ZEALAND. | | |
| Mining schools at | 213 | i |
| | 222 | iv |
| staff | 515 | R C |
| dist., NEW ZEALAND. | | |
| Scheelite from | 517 | R C |
| Otey, —? | | |
| Iron mining by, N. Crosby tp. .. | 44 | ii |
| Otisse, Samuel | | |
| <i>See also</i> Otisse pyrites mine. | | |
| Manager, " " | 80, 134 | vii |
| | 89 | x |
| Gold Mining Co. | | |
| Capital and date of charter | 12 | vii |
| pyrites mine, COOK LAKE, | | |
| NEAR SCHREIBER. | | |
| Notes on, 1898 | 80, 134 | vii |
| 1900 | 88, 89 | x |
| by Fraleck | 177, 178 | A xvi |
| Photos | 48, 49 | vii |
| Otonabee canal, PETERBORO CO. | | |
| Lock on, made of limestone from | | |
| Dummer tp. | 97 | B xiii |
| river, PETERBORO CO. | | |
| Limestone on, coral bearing .. | 97 | B xiii |
| Morainic hills east of | 233 | A xiii |
| Ott, Michael | | |
| Brick yard of, notes on | 104 | B xv |
| Ottawa, CARLETON CO. | | |
| Anorthosite from, analysis | 226 | viii |
| Apatite in dist. of | 174, 177, 178 | R C |
| Black River formation on | 11 | R C |
| Brick yards at, notes | 60 | B xv |
| photo | 47 | B xv |

Ottawa.—*Con.*

| | Page. | Vol. |
|--|----------|--------|
| Carbide works at | 296 | xi |
| | 140 | xii |
| | 25 | A xvi |
| Clays at and near:— | | |
| boulder, photo | 30 | B xv |
| Erie | 9 | B xv |
| Leda | 215 | x |
| analyses | 31 | B xv |
| photo | 33 | B xv |
| Saugeen | 19, 33 | B xv |
| Experiments at, on insecticides. | | |
| | 115, 116 | xi |
| Fossils from | 224-226 | x |
| Graphite works in. <i>See</i> Ontario | | |
| Graphite Co. | | |
| Iron near, ilvaite | 194 | ii |
| | 201 | ix |
| notes by Birkinbine .. | 345 | R C |
| Mica trimming works at | 28, 291 | xi |
| | 131 | xii |
| | 87-91 | A xvi |
| Sulphide pulp plant at | 199 | A xvi |
| Trenton formation at | 42 | R C |
| Brick Manufacturing Co. | | |
| Brick-yard of, notes | 61 | B xv |
| producing | 29 | xii |
| Carbide Co. | | |
| Notes on, 1900 | 21 | A x |
| 1904 | 87, 88 | A xiv |
| Producing, 1901 | 36 | A xi |
| 1902 | 36 | A xii |
| 1903 | 18 | A xiii |
| 1904 | 18 | A xiv |
| 1905 | 23, 107 | A xv |
| Cobalt Silver Mg. Co. | | |
| Capital and date of charter | 30 | A xvi |
| Ottawa Front, Carleton co. | | |
| Limestone from, analysis | 38, 39 | B xiii |
| co., OHIO. | | |
| Anticline in | 116 | i |
| Apatite mining in, early | 436 | R C |
| Quartzites of | 21 | R C |
| Gold Mg. and Mfg. Co. | | |
| <i>See also</i> Golden Whale mine. | | |
| Sakoose mine. | | |
| Capital and date of charter | 11 | vii |
| Objects of | 53 | vi |
| Option of, on Scotty Island mine. | 42 | ix |
| Works of, Keewatin, description. | | |
| | 60-62 | vii |
| Granite Co. <i>See</i> Canadian | | |
| Granite Co. | | |
| Mica Mining Co. | | |
| Capital and date of charter | 11 | xi |
| Works of, Ottawa | 131 | xii |
| | 86 | A xiv |
| Power Co. | | |
| Supplying power to Ottawa Car- | | |
| bide Co. | 21 | x |
| river, ONT. AND QUE. | | |
| Apatite N. and S. of | 436 | R C |
| Fossils in valley of | 50 | R C |
| Geology of, above Ottawa | 104 | B xiii |
| Glaciation in valley of | 50 | R C |
| notes by Miller .. | 226, 227 | x |
| Iron ores in valley of, notes .. | 32 | ii |
| Laurentian N. of, thickness .. | 168 | i |
| Minor ref. to | 201 | v |

| | Page. | Vol. | | Page. | Vol. |
|--|--------------|--------|---|-----------|--------|
| Ottawa river.—Con. | | | Overstrom, Joseph | | |
| Paleozoic area of..... | 22 | B xiii | Experiments by, on producing | | |
| Leda clay..... | 215 | x | aluminium..... | 20 | A xii |
| Pine in valley of..... | 119 | iv | Ovifak, Disco Island, Greenland. | | |
| Salt water in valley of..... | 32 | B xv | Nickel at..... | 151 | C xiv |
| Waterpower on..... | 252 | vii | Owen, J. K. | 200, 203, | iv |
| Otter. | | | Sound, SYDENHAM TP., GREY | | |
| Abitibi dist..... | 178, | 193 | co. | | |
| | 189 | xii | Brick clay near..... | 122 | viii |
| | 127 | A xiii | Erie..... | 10, 13 | B xv |
| Hinterland, The..... | 133 | iv | works, notes..... | 66 | B xv |
| Moose River basin..... | 178 | A xiii | Cement works at, notes..... | 32 | xii |
| Timagami Lake dist..... | 58 | R C | <i>See also</i> Imperial Cement Co. | | |
| apatite mine, N. BURGESS TP., | | | Sun Portland Cement | | |
| LANARK CO. | | | Co. | | |
| Notes on, 1892..... | 251 | ii | Gravel bed at, photo..... | 27 | B xv |
| cove, L. SUPERIOR, TH. B. D. | | | Limestone near..... | 49, 50 | B xiii |
| Copper prospecting on..... | 134 | viii | quarried..... | 99, 100 | i |
| Iron ore near..... | 314 | xii | Medina sandstone at..... | 48 | B xiii |
| Tin at, salted..... | 139 | vii | Pottery works at..... | 118 | B xv |
| creek, BLANCHE RIVER, QUE. | 36 | B xiv | Springs at..... | 55, 56 | i |
| head, BYRON TP., L. SUPERIOR. | | | sound, GEORGIAN BAY, L. HURON. | | |
| Rocks at and near..... | 305, 349-352 | A xiv | Beaches on..... | 177 | ix |
| granite..... | 306 | A xiv | levels..... | 152, 155 | viii |
| Shores near, description..... | 134 | viii | Ochre on..... | 205 | ix |
| Tin salting near..... | 139 | viii | Water levels at..... | 151 | viii |
| island, L. SUPERIOR, TH. B. D. | | | Sound Brick Co. | | |
| Description of mainland opposite..... | 134 | viii | Capital and date of charter..... | 30 | A xvi |
| lake, ASHBY TP., ADDINGTON | | | Sound Natural Gas and Oil | | |
| CO. | | | Co. | | |
| Granite near..... | 225 | viii | Capital and date of charter..... | 24 | A xiii |
| lake, EPINETTE RIVER, MISSIS- | | | Sound Portland Cement Co. | | |
| SAGI RIVER, ALG. | 168 | xii | Analysis of clay and marl used by..... | 183 | A xiv |
| lake, W. OF 4TH MERIDIAN, R. | | | Brochure by, on cement, extract | | |
| R. D. | | | from..... | 172 | A xiv |
| Faillands near, mineralized..... | 176 | vii | Operating, 1898..... | 16 | vii |
| Minor ref. to..... | 147 | xi | 1899..... | 109 | ix |
| Rocks in vicinity of..... | 165 | vii | 1901..... | 32 | xi |
| Striae near..... | 173 | vii | 1902, notes..... | 32, 35 | xii |
| portage, ABITIBI RIVER. | | | 1903..... | 17 | A xiii |
| Rocks at..... | 142 | A xiii | | 17 | B xiii |
| fossiliferous limestone..... | 32 | B xiii | 1904, notes and pho- | | |
| station, MICHIPICOTEN DIV., | | | tos..... | 154-157 | A xiv |
| ALG. | | | 1905..... | 17 | A xv |
| Graphite near..... | 187 | vii | 1906..... | 20 | A xvi |
| tp., ALG. | | | Sound Stone Co. | | |
| Rocks in..... | 163 | xii | Cement of, quality..... | 17 | iv |
| Otters, The, ABITIBI RIVER. | | | Work by, 1890, notes..... | 99, 100 | i |
| Character of river near..... | 192 | viii | 1899, "..... | 110 | ix |
| Corniferous formation near..... | 47 | R C | Owens, John | 167 | iii |
| Notes on, and vicinity..... | 186 | iii | college, MANCHESTER, ENG. | | |
| Ottertail, ALG. | 37-39 | iii | Notes on, by Richards..... | 512 | R C |
| lake, N. OF L. HURON, ALG. | | | Owl. | | |
| Beach at, height of..... | 152, 153 | viii | Abitibi dist..... | 253 | A xiv |
| Rocks on and near..... | 158, 159 | viii | great horned | | |
| Waters of, lowered..... | 38 | iii | Abitibi dist..... | 243 | A xiv |
| Otto tp., NIP. | | | screech | | |
| Rocks in..... | 230 | xi | Abitibi dist..... | 126 | A xiii |
| granite..... | 178 | xii | Ox pt., BAY OF QUINTE. | | |
| Keewatin..... | 264, | A xiv | Limestone quarries at..... | 27 | B xiii |
| Otty lake, N. BURGESS TP., LANARK | | | Oxalis acetosella. | | |
| CO. | | | Abitibi Lake dist..... | 241 | A xiv |
| Apatite on, evidence before R.C. | | | Mattagami valley..... | 150 | A xv |
| 167, 168, 174-176 | | R C | Oxalite. | | |
| veins, character..... | 440 | R C | Kettle pt. | 205 | ix |
| Oven bird. | | | Oxbow, The, SAUGREY RIVER. | | |
| Abitibi dist..... | 243 | A xiv | Lithographic stone at..... | 36 | B xiii |

| | Page. | Vol. | | Page. | Vol. |
|--|----------|--------|--|-----------|--------|
| Oxford, WARREN CO., N. J. | | | Paddon, S. W. | 48 | ix |
| Concentration process at iron furnace of | 330 | xii | Paddy lake, MICHIGICOTEN DIV., | | |
| co. | | | ALG. | 294 A | xiv |
| Brick-yard of, notes | 85-87 | B xv | Paget, George | 59 | xi |
| Limestone in, notes by Miller | 91 | B xiii | John | 51 | xii |
| Corniferous | 25 | B xiii | Paint. | | |
| gold mine, ANZHEKUMMING | | | Arsenic in | 120 | xi |
| LAKE, R. R. D. | | | See also Mineral pigments and | | |
| Notes on, 1899 | 61, 62 | ix | Ochre. | | |
| Mining Co. | 61 | ix | creek, DOG RIVER, L. SUPERIOR. | | |
| tps., OXFORD CO. | | | Canoe route by | 289, 290 | A xiv |
| Brick-yard in. See Highgate. | | | Drainage area of | 285 | A xiv |
| Oil refineries in. See Ingersoll. | | | Iron ore on | 323 | A xiv |
| Oxygen. | | | mining | 139 | x |
| Manganese for producing | 462 | R C | Minor refs. to | 290, 292 | A xiv |
| Notes on, by Copp. | 447 | R C | lake, MICHIGICOTEN DIV. | | |
| Proportion of, in earth's crust | 447 | R C | Brule patches on | 296 | A xiv |
| Oxhydrogen light. | | | Iron ore on and near | 256, 257 | viii |
| Lime used in making | 6 | B xiii | 160, 161 | ix | |
| Oyster, L. A. | 52 | x | limonite | 324 | A xiv |
| Oysters. | | | magnetite | 200 | x |
| Shells of, for road-making | 104 | iii | mining. See Frances m. | | |
| | | | Length of | 292 | A xiv |
| P 75 gold loc. See Baby, Wil- | | | Minor ref. to | 285 | A xiv |
| liam B. | | | Ochre on, yellow | 257 | viii |
| 165 gold loc., ANZHEKUMMING | | | 161 | ix | |
| LAKE, R. R. D. | 85 | vi | Rocks on and near | 314, 323, | |
| 175, 190-194, 282 gold locs. | | | 324, 344, 351, | 354 | A xiv |
| See Gold Hill mine. | | | greenstone | 302 | A xiv |
| 188 gold loc., SHOAL LAKE, L. | | | Trees near | 296 | A xiv |
| OF THE WOODS | 107 | vi | Striae near, direction | 178 | ix |
| 192 gold loc. See Black Jack | | | Painter, Robert K. | | |
| mine. | | | Notes by, on pyrites deposits of | | |
| 221 gold loc. See King gold mine. | | | Virginia | 192 | A xvi |
| 263 gold loc. See Bullion gold | | | J. & Sons. | | |
| mine. | | | Labour employed by, statistics | 370 | R C |
| 289 gold loc. See Wimor gold | | | Paipoonge tp., TH. B. D. | | |
| mine. | | | Argentite in | 194 | ix |
| 317 gold loc., L. OF THE WOODS, | | | Silver mining on | 200 | R C |
| R. R. D. | 182 | v | See also Cariboo mine. | | |
| 382 gold loc., ANZHEKUMMING | | | Lily of the Valley mine. | | |
| LAKE, R. R. D. | 85 | vi | Paisanite. | | |
| 395 gold loc. See Norway gold | | | Essex co, Mass. | 190 | ix |
| mine. | | | Paisley, ELDERSLIE TP., BRUCE CO. | | |
| 400, 409 gold loc. See Treasure | | | Bedded dolomites near | 36 | B xiii |
| gold mine. | | | Brick-yard at, notes and photo. | 59 | B xv |
| 444 gold loc., MIDDLE ISLAND, | | | clay for, analysis | 15 | B xv |
| L. SUPERIOR | 104 | vi | Saugeen | 19, 33 | B xv |
| 447 gold loc. See Sweden Gold | | | Pakenham, PAKENHAM TP., LANARK | | |
| Mg. Co. | | | co. | | |
| 566, 567 gold locs. See Regina | | | Fossils from | 224 | x |
| gold mine. | | | Silurian rocks in | 70 | B xiii |
| 577, 580 iron locs., NICKEL | | | Palaeontology. | | |
| LAKE, R. R. D. | | | Value of, to a Survey | 422 | R C |
| Notes on, by Coleman | 74 | iv | Palakod, PAPARAPATTI DIST., | | |
| | 175 | A xvi | BURMA | 233 | viii |
| 656 gold loc. See Emperor gold | | | Palaeozoic. | | |
| mine. | | | Eastern Ontario | 209 | vii |
| Pacey, Frank | 200, 201 | iv | Hudson bay, notes by Bell | 246 | v |
| Pacific Coal and Oil Co. | | | Notes by Miller | 21-26 | B xiii |
| Capital and date of charter | 25 | A xiv | Sub-divisions of | 2 | R C |
| Packer ? | | | Structure and distribution | 5, 6 | R C |
| Experiments by, on nickel-steel | 139 | ii | Systems underlying, order of | 52 | i |
| Packfong (NICKEL ALLOY) | | | Palisades silver mine, LYBSTER TP., | | |
| Composition of | 163, 164 | C xiv | TH. B. D. | | |
| Packham, William James | | | Notes on, 1891 | 229 | i |
| Brick-making by, Brampton | 89 | B xv | Palladian islands, L. SUPERIOR. | | |
| | | | Lower Slate conglomerate on, | | |
| | | | photo | 136, 137 | viii |

| | Page. | Vol. | | Page. | Vol. |
|---|-----------------|------|--|---------------|------|
| Palladium. | | | Pancake Bay mine, PANCAKE BAY, L. SUPERIOR. | | |
| See also Sperrylite. | | | Area and description of..... | 241-243 | ii |
| In sperrylite..... | 190 | ii | Fissure veins in..... | 75 | iii |
| Occurrences and uses..... | 6-8 A | xiv | Work on, by Silver Islet Co..... | 73 | iii |
| Production, 1904..... | 1-3, 6-8 A | xiv | creek, LARDER LAKE, NIP. | | |
| 1904-6..... | 6 A | xvi | Rocks on and near..... | 207 A | xvi |
| 1905..... | 1-3 B | xv | greenstone, photo..... | 209 A | xvi |
| Sudbury dist..... | 153, 155, 162 C | xiv | lake, NEAR LARDER LAKE, NIP. | | |
| Palliser, Capt. John | | | Rocks on..... | 208 A | xvi |
| Description by, of a storm on Lac | | | river, L. SUPERIOR, ALG. | | |
| des Mille Lacs..... | 119 | v | Iron ore on..... | 23 | R C |
| Notes by, on Kenora..... | 169 | v | <i>Panemka canadensis.</i> | | |
| Palmberg, Herr Th. | | | Anderdon tp..... | 126 | xi |
| Notes by, on peat production in | | | " <i>grandis.</i> | | |
| Sweden..... | 219, 220 | ii | St. Marys..... | 127 | xi |
| Palmer, C. | 87 | ix | 151, 152 | xii | |
| Walter William | | | 96 B | xiii | |
| Paper by, on a pioneer's experi- | | | Panorama lake, W. OF RAINY LAKE, | | |
| ences on Lakes Huron and | | | R. R. D. | | |
| Superior..... | 171-178 | ii | Keewatin rocks on..... | 61 | iv |
| rapid, MADAWASKA RIVER. | | | Pansway, William | 139 | viii |
| Corundum at..... | 221 | vii | Paparapatti dist., BURMA. | | |
| 222-224 | viii | | Corundum of, notes by Holland. | 232 | viii |
| Photo of..... | 222 | vii | Paper. | | |
| Waterpower of..... | 66 | vi | Calcium sulphate for making..... | 61, 62 | x |
| 219 | vii | | Peat for making..... | 35 A | xiii |
| tp., ALG. | | | Tale in manufacture of..... | 24 | x |
| Iron ores north of, notes by Cole- | | | <i>Papilio turans.</i> See Swallow tail, | | |
| man..... | 189, 190 | x | yellow | | |
| Palmerston tp., FRONTENAC CO. | | | Papineau creek, YORK RIVER. | | |
| Chalcopyrite in..... | 196 | ix | Crystalline limestone on..... | 222 | viii |
| Field prospecting in..... | 213, 218 | v | Syenite near..... | 218, 220, 221 | viii |
| Geological features of..... | 218 | v | Valley of, notes..... | 221 | vii |
| Iron ore in..... | 45 | ii | Waterpower of..... | 218 | vii |
| exhibited at World's Fair..... | 80, 81 | ii | Papoose islands, GEORGIAN BAY, L. HURON. | | |
| Iron ore in, hematite..... | 139 | R C | Limestone in, notes..... | 29 B | xiii |
| 199 | ix | | Paps, The, BLACK BAY, L. SUPERIOR. | | |
| magnetite..... | 218 | v | Rocks of, trap..... | 15 | v |
| mining. See Lizzie m. | | | Paquette rapid, ALLUMETTE ISLAND, | | |
| Wilbur m. | | | Que. | | |
| Magnesite in..... | 202 | ix | Black River formation at..... | 104 B | xiii |
| Mica in..... | 244 | i | <i>Paraclytus elliptica.</i> | | |
| 203 | ix | | Anderdon tp..... | 125 | xi |
| Palmita Mg. and Development Co. | | | St. Marys..... | 152 | xii |
| Capital and date of charter..... | 12 | vii | Paradis bay, L. TIMISKAMING. | | |
| Palms iron mine, PENOKEE-GOGERIC | | | Huronian rocks west of..... | 40 B | xiv |
| RANGE, U. S..... | 146 | iii | Paraffine wax. | | |
| Pam, Max | 22 | xi | As residue from petroleum..... | 155, 157, 164 | R C |
| Pan American Exhibition. | | | Statistics of. See Oil, statistics. | | |
| Feldspar at, from Bedford tp.... | 39 | xi | Paragrene (Insecticide). | | |
| Ferro-nickel at..... | 62 | x | Analysis of..... | 116 | xi |
| Graphite at, from Brougham tp.... | 25 | x | <i>Parazyga hirsuta.</i> | | |
| 27 | xi | | Anderdon tp..... | 125 | xi |
| Nepheline rocks at..... | 213 | xi | Paresseux rapid, KAMINISTIKWIA | | |
| Ontario exhibit at, report by | | | RIVER, TH. B. D. | | |
| Speller..... | 83-90 | xi | Sphalerite in..... | 209 | ix |
| photos at..... | 80, 81 | xi | Pardee, T. Blair | 4 | i |
| Panache lake, NIP. | | | Pargasite. | | |
| Copper on..... | 24 | R C | Renfrew co..... | 194 | ii |
| Limestone on, analysis and | | | Madawaska river, analysis.... | 206 | ix |
| notes..... | 29, 30 B | xiii | Parham, HINCHINBROOKE TP., FRON- | | |
| dolomite, notes..... | 82 | i | TENAC CO. | | |
| for burning.... | 94 | i | See also Boyd-Smith mine. | | |
| Quartzite on; syncline near..... | 72 | i | Diallage near..... | 197 | ix |
| Pancake bay, L. SUPERIOR. | | | Gabbro near, notes by Miller... | 228, 229 | viii |
| Mining locations on..... | 69 | iii | | | |
| See also Pancake Bay mine. | | | | | |
| Rocks on..... | 78 | iii | | | |
| sandstone..... | 68 | iii | | | |

| | Page. | Vol. | | Page. | Vol. |
|--|----------|------|---|-------------------------------------|------|
| Parham.—<i>Con.</i> | | | Park Bros. & Co. | | |
| Hypersthene near..... | 200 | ix | Labour employed by, statistics.. | 370 | R C |
| Limestone near, analysis..... | 45 B | xiii | Steel output of, 1893..... | 120 | ii |
| Norite at..... | 228 | viii | Parker, Dr. F. | 53 | xi |
| micro-photo..... | 216, 217 | viii | M. L..... | 80 | xii |
| Paris, Thomas | | | S. J..... | 110 | ix |
| Gold prospecting by..... | 105, 197 | vii | Parkes, Mrs. A. W. | 117 | ix |
| Manager, Lizzie gold mine..... | 59, 60 | viii | | 143 | x |
| Paris, FRANCE. | | | Alexander | | |
| Corundum from Ontario, exhibited at..... | 240 | viii | Nickel-steel made by..... | 165 c | xiv |
| Gypsum near..... | 119 | R C | Parkhill, W. WILLIAMS TP., MID-DLESEX CO. | | |
| Mica from Ontario sold in (1860)..... | 86 A | xvi | Artesian wells near..... | 61 | i |
| Peat-charcoal in, price of..... | 207 | i | Brick-yard at..... | 80 B | xv |
| Peat pamphlet for Exhibition of, (1878)..... | 197 | ii | Salt at..... | 55, 186 | R C |
| Streets of, mahogany used in,... | 104 | ii | Salt Co. | | |
| Paris, MAINE, U.S. | | | Operating, 1902..... | 38 | xii |
| Indicolite at..... | 200 | ix | 1905..... | 21 A | xv |
| Paris, S. DUMFRIES TP., BRANT CO. | | | 1906..... | 23 A | xvi |
| Alabastine Cos. works at..... | 38 | xii | Parks, Alexander | 224, 234, 235 | vii |
| Gypsum at and near..... | 110 | i | Emily H..... | 75 | xi |
| analysis..... | 199 | ix | G. F..... | 105 | vii |
| boring for..... | 56 B | xiii | 101, 105 | viii | |
| evidence before R. C..... | 121, 122 | R C | 143 | x | |
| mining, notes, 1891..... | 243 | i | 75 | xi | |
| 1892..... | 253 | ii | 67 | xii | |
| 1893..... | 196, 197 | iii | 49 | xiii | |
| 1894..... | 250, 251 | iv | William Arthur | | |
| 1895..... | 280, 281 | v | Cobalt discoveries reported on, for Dominion Survey..... | 203 A | xvi |
| 1896..... | 278, 279 | vi | Determination by, of fossils from Port Colborne..... | 35 | xi |
| 1897..... | 99, 100 | vii | Notes by, on iron deposits E of L. Nipigon..... | 311 | xii |
| 1901..... | 34 B | xiii | Paper by, on fossiliferous rocks of:— | | |
| by Merritt..... | 119 | R C | Kwataboahagan river..... | 180-191 A | xiii |
| Historical notes..... | 113, 114 | i | Southwest Ontario..... | 141-186 | xii |
| Limestone at and near:— | | | Reference to explorations by:— | | |
| analysis..... | 147 | xii | Abitibi dist..... | 108 A | xiii |
| 15, 16 B | xiii | | 197, 198, 205, 208 A | xiv | |
| boulders for burning..... | 149 | xii | 117, 122 A | xv | |
| fossiliferous..... | 92 B | xiii | Mattagami River dist..... | 182, 185 | x |
| 91 B | xiii | | Moose River basin..... | 121, 158 A | xiii |
| Morainic deposits near..... | 115 B | xiii | Reports by:— | | |
| Natural gas piped to..... | 23 A | xv | 1894. Summer Mining classes..... | 217-221 | iv |
| 25 A | xvi | | 1897. Geology of base and Meridian lines in Rainy River dist..... | 161-182 | vii |
| Onondaga formation at..... | 33 B | xiii | 1898. Nipissing-Algoma boundary..... | 174-196 | viii |
| Travertine near..... | 34 B | xiii | 1899. Niven's base line..... | 124-142 | ix |
| Waterworks at..... | 148 | xii | Work by, 1902..... | 5 | xii |
| 34 B | xiii | | 1903..... | xii, 135, 137, 142, 143, 168, 174 A | xiii |
| Lyons and Mediterranean R'y. | | | lake, MICHIGICOTEN DIV. | | |
| Tests by, on peat as fuel..... | 203 | i | Iron on, hematite boulders..... | 173 | xi |
| green. | | | mining..... | 256 | viii |
| Arsenic for..... | 29, 111 | xi | 104 | xii | |
| 32 B | xiv | | <i>See also Josephine mine.</i> | | |
| As a paint..... | 120 | xi | Rocks on..... | 158 | ix |
| As an insecticide..... | 116, 117 | xi | Eleanor slates..... | 158 | xi |
| Composition, preparation and uses..... | 113 | xi | iron bearing..... | 195, 200 | x |
| Notes on..... | 69 | xii | 173, 175 | xi | |
| Parisian isle, L. SUPERIOR. | | | lake, W. OF VERMILION LAKES, | | |
| Beaver farm on..... | 110 | v | R. R. D. | | |
| Minor ref. to..... | 172 | ii | Notes on, by Parks..... | 175 | vii |
| Potsdam formation on..... | 40 | R C | | | |
| "Paristone." | | | | | |
| Gypsum used in..... | 38 | xii | | | |
| Park, E. | 105 | vi | | | |
| Mungo | | | | | |
| Smelting furnace found by, Africa..... | 355 | R C | | | |

| | Page. | Vol. |
|---|--------------------|--------|
| Parks well, ANDERDONT P., ESSEX CO. | | |
| Log of boring..... | 42 | B xiii |
| Parliament, Acts of <i>See</i> Acts of Parliament. | | |
| Buildings, OTTAWA. | | |
| Building-stone of..... | 40, 79, 82 | R C |
| 103, 104 | | B xiii |
| Buildings, TORONTO. | | |
| Building-stone of..... | 80 | R C |
| <i>Parnassia palustris.</i> | | |
| Mattagami valley..... | 151 | A xv |
| Parnell, Charles Stewart | | |
| Evidence by, <i>re</i> royalties in Ire-land..... | 36, 37 | i |
| Parr, Mrs. S. | 117 | ix |
| Parry, George | | |
| Smelting process of..... | 321, 362 | R C |
| and Mills. | | |
| Blast furnace of..... | 326, 394 | R C |
| cost of iron production.. | 331, 332 | R C |
| harbour, GEORGIAN BAY, L. HURON. | | |
| Limestone of, notes..... | 166 | ix |
| 95 | | B xiii |
| island, GEORGIAN BAY. | | |
| Appearance of, twisted..... | 67 | i |
| Pyrrhotite on, nickeliferous..... | 261 | viii |
| Rocks on, limestone..... | 166 | ix |
| 94 | | B xiii |
| petrography..... | 181 | ix |
| Sound, McDougall tp., P. S. D. | | |
| Copper at and near:— | | |
| bornite and chalcocite.... | 195, 196 | ix |
| pyrites..... | 37 | iv |
| Electric furnace at..... | 115 | xii |
| Graphite at..... | 199 | ix |
| Mining class at..... | 282 | viii |
| Recorder's office at..... | 36 | A xvi |
| Rocks at and near..... | 99 | iv |
| age..... | 169 | ix |
| limestone..... | 93 | B xiii |
| sound, L. HURON. | | |
| Malachite on..... | 202 | ix |
| Sound Copper Mfg. Co. | | |
| Accident at mine of..... | 32 | ix |
| Acknowledgments to..... | 143 | ix |
| Capital and date of charter..... | 10 | ix |
| Work by, 1898..... | 259-262 | viii |
| 1899..... | 100, 167, 170, 171 | ix |
| 1900..... | 120, 121 | x |
| 1901..... | 267 | xi |
| 1904..... | 80 | A xiv |
| Sound dist. | | |
| Apatite in, possibility of..... | 94 | i |
| Brick yards in, notes on..... | 88, 89 | B xv |
| Copper in, mining, 1899..... | 100 | ix |
| 1900..... | 120, 121 | x |
| 1901..... | 267 | xi |
| 1902..... | 115, 116 | xii |
| 1903..... | 93, 94 | A xiii |
| <i>See also</i> McGowan mine. | | |
| report by Coleman. | 259-262 | viii |
| 164-172 | | ix |
| Mica mining in..... | 279 | v |

Parry Sound dist.—*Con.*

| | | |
|--|----------|---------|
| Mining lands in, statistics of sales and leases, 1891..... | 7, 8 | i |
| 1892..... | 7 | ii |
| 1893..... | 5 | iii |
| 1894..... | 10 | iv |
| 1895..... | 9 | v |
| 1896..... | 10 | vi |
| 1897..... | 14, 15 | vii |
| 1898..... | 10 | viii |
| 1899..... | 11 | ix |
| 1900..... | 10 | x |
| Peat in..... | 191 | i |
| 209 | | ii |
| Rocks in, anorthosites..... | 11 | R C |
| limestone..... | 92 | B xiii |
| petrography..... | 180-182 | ix |
| Striae in, direction..... | 178, 179 | ix |
| Sound Mining div. | | |
| Creation of..... | 36 | A xvi |
| Description of..... | 44 | A xvi |
| Parsons, Henry | | |
| Mica mining by, L. of the Woods. | 64 | R C |
| Silver mining by, Paipoonge tp.. | 229 | i |
| Partington, J. A. | 96 | x |
| Thomas. | 121 | vii |
| Partridge, E. T. | 105 | viii |
| L. W. | | |
| Gold mining by, Jaffray tp..... | 186 | v |
| 49 | | vi |
| 57 | | vii |
| Partridge. | | |
| Abitibi dist..... | 253 | A xiv |
| decrease..... | 186, 193 | viii |
| Harold lake..... | 146 | v |
| Michipicoten div..... | 200 | A xv |
| Mississagi river..... | 172 | xii |
| Nipigon Lake dist..... | 139 | A xvi |
| Niven's base line, Alg., scarce.. | 142 | ix |
| spruce. | | |
| Abitibi river, south of..... | 189 | xii |
| creek, PARTRIDGE LAKE, SEINE RIVER, R. R. D. | | |
| Notes on: gold prospecting near. | 73 | vi |
| Photo of portion of..... | 32, 33 | vi |
| =crop (BIXCOMODAI) lake, | | |
| BLANCHE RIVER, NIP. | | |
| Description of, by Bolton..... | 174 | xii |
| gold mine, PARTRIDGE LAKE, | | |
| SEINE RIVER, R. R. D. | | |
| Granite in, altered..... | 87 | v |
| Quartz of, character..... | 36 | iv |
| inlet, P. S. D. | | |
| Blotched diorite on..... | 94 | B xiii |
| island, MINAS BAY, N. S. | | |
| Chalcedony on..... | 224 | vi |
| lake, BRENNER RIVER. <i>See</i> | | |
| Peenay lake. | | |
| lake, SEINE RIVER, R. R. D. | | |
| Gold on..... | 26 | R C |
| character of ore..... | 62 | R C |
| mining..... | 4 | Bull. i |
| 73, 267 | | vi |
| Huronian schist on..... | 73 | vi |
| =nest portage, MISEMIKOWISH LAKE, NIP. | | |
| Description of, by Miller..... | 223 | xi |
| <i>Parus atricapillus. <i>See</i> Chickadee.</i> | | |

| | Page. | Vol. | | Page. | Vol. |
|--|-----------|--------|---|--------|--------|
| <i>Parus hudsonicus</i> . See Chickadee, Hudsonian | | | Paulson, Paul | | |
| Pascoe, Peter | 239 | iv | Manager, Giant mine..... | 92 | xii |
| W. B. | 225 | v | | 67 | A xiii |
| | 28 | iii | Mining by, Manitou lake..... | 53 | A xiv |
| | 182 | v | | 123 | vii |
| Pashoskoota river , MISSISSAUGA RIVER, ALG. | 145 | A xiii | | 247 | xi |
| | 286, 344, | A xiv | bay , L. TIMISKAMING, QUE. | | |
| Paskon Indian Reserve . | | | Shape of..... | 36 | B xiv |
| Area of..... | 167 | v | Pavements . See Street pavements. | | |
| Pasley, Sir C. W. | 188 | A xiv | Paving-brick . See Brick, vitrified stones. | | |
| Passage, The , L. OF THE WOODS, ONT. | | | Canada, production, 1886-87.... | 243 | R C |
| Gold mining on..... | 114 | vii | Madoc tp..... | 87 | R C |
| Minor ref. to..... | 181 | v | Pawatik river , VERMILION RIVER. | | |
| Passaic river , NEW JERSEY, U. S. | | | Galena and zinc-blende on..... | 91 | i |
| Waterpower of..... | 485 | R C | Paxton iron mine , LUTTERWORTH TP., HALIBURTON CO. | | |
| <i>Passer domesticus</i> . See Sparrow, house | | | Ore tes on, by J. B. Campbell.... | 132 | R C |
| <i>Passerina cyanea</i> . See Bunting, Indian | | | Ore from, at World's Fair..... | 79 | ii |
| Passy, P. H. | 45 | xi | Production of..... | 61 | ii |
| Paterson, M. J. | | | Payen, Marie | 63 | B xiv |
| Iron prospecting by, near Peninsula | 135 | viii | Paymaster gold mine , ANZHEKUMMING LAKE, R. R. D. | | |
| R. H. | 47 | A xiii | Notes on, 1904..... | 54 | A xiv |
| Paterson, PASSIAC CO., N. J. | | | 1905..... | 52 | A xv |
| Waterpower at..... | 485 | R C | 1906 and photo..... | 13, 58 | A xvi |
| Patomagetons . | | | Payne, H. B. | 170 | C xiv |
| Moose River basin..... | 177 | A xiii | river, NATION RIVER. | | |
| Paton copper mine . See Peyton copper mine. | | | Marine deposits on..... | 219 | x |
| Pattee, G. I. | 117 | ix | Peat on, sources of..... | 190 | i |
| | 143 | x | Trenton formation on..... | 111 | B xiii |
| Patterson, A. | 61 | viii | Pays Plat , NIPIGON BAY, L. SUPERIOR. | | |
| D. C. | 105 | viii | Silver at..... | 267 | v |
| | 143 | x | Pea . | | |
| G. H. | 95 | viii | Mentioned as growing at:— | | |
| H. | 44, 64 | viii | Abitibi lake..... | 50 | A xvi |
| | 49 | ix | Fort Mattagami..... | 121 | A xiii |
| | 74 | x | Lac des Mille Lacs..... | 114 | v |
| J. C. | 87 | x | Pringle tp..... | 170 | ix |
| John..... | 222 | ix | Wabigoon..... | 62 | v |
| Reddie..... | 125 | v | Wanapitei Lake dist..... | 137 | vii |
| Pattison, R. M. | | | wild | | |
| Copper prospecting by, Th. B. d. | 78 | A xi i | Abitibi Lake dist..... | 241 | A xiv |
| Patton lake , McMAHON TP., ALG. | | | Peace, G. | 493 | R C |
| Copper mining on..... | 273 | xi | M. W. | 507 | R C |
| tp., ALG. | | | Pearce, T. B. See Pearce gold mine. | | |
| Copper mining in..... | 41 | A xvi | T. P. | | |
| Pattullo, Dr. Alexander | | | Owner, Blairton iron mine..... | 21 | ii |
| Sandstone quarries of, Credit Forks..... | 74, 79 | R C | (SEVERN) gold-arsenic mine , MARMORA TP., HASTINGS CO. | | |
| See also Scott and Pattullo. | | | Minor ref. to..... | 197 | xi |
| Paudash lake , CARDIFF TP., HALIBURTON CO. | 215 | viii | Mispickel in..... | 104 | xi |
| Paul . See Paulson, Paul | | | Notes on, by Blue..... | 53 | iii |
| Paul (INDIAN) | 242 | v | Work at, 1902..... | 110 | xii |
| lake , STURGEON RIVER, NIPISSING LAKE. | | | 1904..... | 76 | A xiv |
| Rocks on..... | 69, 84 | i | See also Atlas Arsenic Co. | | |
| Paulet cape , BRUCE CO. | | | Pearl (PEARL RIVER) , L. SUPERIOR, TH. B. D. | | |
| Clinton formation at..... | 36 | B xiii | Copper mining near. See Black Bay Mg. Co. | | |
| Pauly, Dr. Peter August | 82 | xi | Galena near..... | 38 | R C |
| Paulson iron claims , NEAR ARROW LAKE, PIGEON RIVER DIST..... | 20 | xii | spar. | | |
| | | | Clinton tp..... | 73 | B xiii |
| | | | Composition of..... | 529 | R C |
| | | | Pears, John | | |
| | | | Brick-making by, Davisville.... | 29 | xii |
| | | | | 110 | B xv |

| | Page. | Vol. | | Page. | Vol. |
|----------------------------------|---------------------|--------|---|------------------------|--------|
| Pearson, Capt. Hugo | | | Peat.—<i>Con.</i> | | |
| Armour-plate tests conducted by. | 143 | ii | Brockville, analyses. | 203 | xii |
| W. H. | 108 | ix | company formed to | | |
| | 154 | A xiv | work. | 227 | A x |
| Peat. | | | idle, 1903. | 29 | A xiii |
| Analysis of. | 166 | vi | notes. | 205, 206 | xii |
| Canada, paper by Ells. | 195-200 | ii | photo, facing. | 192 | xii |
| Composition of. | 183 | i | Carleton co. | 190 | i |
| Dartmoor, Eng., experiments on. | 207 | ii | | 197 | ii |
| Description of. | 539 | R C | | 190 | vi |
| | 219 | vi | Distribution of. | 178 | i |
| Europe. | 187-189 | i | | 197, 209 | ii |
| | 211, 212 | ii | Eby tp. | 179 | xii |
| | 197-200 | xii | Hawkesbury tp. | 122 | A xiv |
| | 32, 33 | A xiii | Hudson Bay slope, inexhaustible. | 70 | R C |
| Exhibited at Buffalo. | 87 | xi | Industry of, 1897. | 22, 23 | vii |
| Chicago. | 193 | ii | 1899. | 21-24 | ix |
| For fuel, calorific power. | 166 | vi | 1904. | 22, 23 | A xiv |
| compared to wood and | | | Kesagami lake, analysis. | 175 | A xiii |
| anthracite. | 200 | ii | notes by J. M. | | |
| efforts to produce. | 32 | iv | Bell. | 148-150, 174 | A xiii |
| | 25 | A xvi | photos. | 144, 145, 151 | A xiii |
| method of preparing. | 191-206 | i | Mattagami valley. | 188-192 | A xiv |
| production, 1903. | 3, 4 | A xiii | | 120, 125-128, 142, 151 | A xv |
| 1904. | 1, 3, 23 | A xiv | Michipicoten River, photo. | 197 | A xv |
| 1905. | 1, 4 | A xv | Moose River basin. | 174 | A xiii |
| 1906. | 25 | A xvi | Muskego (Swampy) river. | 134 | ix |
| For moss-litter:— | | | Newington, analysis. | 203 | xii |
| Holland, price. | 197 | ii | notes. | 219, 227 | x |
| New Brunswick. | 199 | ii | | 208, 223 | xii |
| notes by Blue. | 33, 34 | iv | | 30 | A xiii |
| Copenhagen Milk Co. | | | photos. | 208 | xii |
| | 211, 212 | ii | Nipigon Lake dist. | 135 | A xvi |
| paper on, by Jack. | 139-144 | iii | Paint lake. | 324 | A xiv |
| uses. | 121 | iv | Board Co. | | |
| For paper. | 35 | xii | Notes on, 1903. | 35 | A xiii |
| Manufacture of. | 205, 215 | ii | charcoal. | | |
| | 122 | iv | Value of, for furnaces. | 207-209 | i |
| paper by Carter. | 191-234 | xii | Development Syn. | | |
| * 27-35 | A xiii | | Capital and date of charter. | 11 | xi |
| Gibson. | 180-211 | i | Exhibit of, at Buffalo. | 90 | xi |
| | 203-208 | ii | See also Peat Industries, Ltd. | | |
| Origin and nature of. | 182 | i | Fuel Syndicate. | 114 | x |
| | 198 | ii | Industries, Ltd. | | |
| Prince Edward island. | 201, 210 | ii | Capital and date of charter. | 11 | xi |
| Report on, by Geological Survey. | | | Exhibit of, at Buffalo. | 87 | xi |
| ref. to. | 206 | ix | Peat machinery of. | 200, 231 | xii |
| Abitibi dist. | 190 | viii | Plant of, diagrams. | 109 | xi |
| | 190, 101, 194, 209, | A xiv | notes. | 30 | A xiii |
| | 125, 126 | A xv | Property of, Welland, notes. | 203 | xii |
| analyses. | 246 | A xiv | Prospectus of, notes from. | 231 | xii |
| | 128 | A xv | island, KESAGAMI LAKE, NIP. | | |
| Albany River dist. (north). | 116 | iv | Minor ref. to. | 148 | A xiii |
| Atikokan river. | 146 | xi | Photo of. | 144, 145 | A xiii |
| Beaverton, analysis. | 202 | xii | Machinery Supply Co. | | |
| fuel from. | 25 | A xvi | Cost given by, of briquetting. | 225 | xii |
| cost of making. | 225 | xii | Experiments by, on peat. | 200 | xii |
| method of working. | | | Machinery supplied by, ref. to. | 208 | xii |
| | 210-214, 217, 218, | xii | meal or Peat litter. | | |
| notes. | 204 | xii | Moss litter. | | |
| paper from. | 35 | xii | Peavey, P. H. | 31 | xi |
| plant, notes. | 22 | ix | Pebble vein, GOLD HILL MINE, L. | | |
| | 27, 29 | A xiii | OF THE WOODS. | | |
| output. | 23 | A xiv | Work on, 1896. | 251 | vi |
| | 24 | A xv | 1897-8. | 37 | vii |
| photo. | 208, 209 | xii | Pebonishewening lake, E. OF RICE | | |
| | | | LAKE ALG. | 131 | ix |

* First issued as Bull. No. 5.

| | Page. | Vol. | | Page. | Vol. |
|---|---------|--------|---|------------|--------|
| Pechonegoness lake, MICHIPICOTEN DIV., ALG. | | | Pelican lake, BURGESS TP., LANARK CO. | | |
| Wrongly mapped | 198 | vii | Apatite on | 180 | R C |
| Peck, A. L. | 74 | xi | lake, MINNITAKI LAKE, R.R.D. | | |
| Peckham, S. F. | | | Geology of, and vicinity.... | 167, 168 | B vii |
| Views of, re origin of gas and oil. | 95 | A xiv | Glacial striae on | 88 | v |
| <i>Pecten islandicum.</i> | | | Gold on | 178 | vii |
| James bay | 143 | A xiii | Photos of | 124, 125 | vii |
| Pectolite. | | | Rocks on | 95 | v |
| McKellar pt. | 206 | ix | Route from, to Lonely lake.... | 59, 60 | v |
| Thunder bay | 194 | ii | lake, RUGBY TP., R. R. D. | | |
| Peebles, George | 92 | iii | Rocks on | 169 | vii |
| Peel co. | | | Soil in vicinity of | 175 | vii |
| Beach in | 229 | A xiii | Timber near | 181, 182 | vii |
| Brick-yards in, notes | 89-91 | B xv | rapid, PELICAN RIVER, R.R.D. | | |
| Limestone in, notes by Miller.... | 95 | B xiii | Rocks near | 95 | v |
| tp., WELLINGTON CO. | | | river, WABIGOON RIVER, R.R.D. | | |
| Gas in, log of bore-hole | 110 | A xv | Rocks on | 169 | vii |
| Oil in, boring for | 24 | A xiii | Soil in valley of | 175 | vii |
| Onondaga limestone in | 122 | B xiii | and timber | 182 | vii |
| Trenton formation in. <i>See</i> Alma. | | | Pelkonen, William | 40, 41 | A xiii |
| Peenay (Partridge) lake, BREMER RIVER. | | | Peller, Thomas | 71 | ix |
| Altitude of | 136-138 | viii | Pelletier, E. | 25 | ix |
| Peep bay, MANITOU LAKE, R.R.D. | 87 | vi | Pelley, W. | 143 | x |
| Peerless Larder Lake Mines. | | | Pellow, H. | 117 | ix |
| Capital and date of charter | 28 | A xvi | | 143 | x |
| Rocks on claims of | 210 | A xvi | Peloux, M. du | | |
| silver mine, GILLIES TP., TH. B. D. | 199 | R C | Notes by, on nickel mining, New Caledonia | 373 | R C |
| Pegmatite. | | | Pembina island, KENOGAMI RIVER. | | |
| Description of | 539 | R C | Argillaceous beds on | 32, 33 | B xiii |
| Foley tp. | 99 | iv | Pembroke, PEMBROKE TP., REN-FREW CO. | | |
| | 168 | ix | Brick-yards at | 96 | B xv |
| Hastings corundum dist. | 212 | vii | clay for, analysis | 27 | B xv |
| | 215 | viii | Sangeen | 19, 20, 33 | B xv |
| | 205 | xi | Chazy limestone at, analysis.... | 105 | B xiii |
| Kingston dist., feldspar in dikes of, for pottery | 205 | ix | Pembroke channel, OTTAWA RIVER. | | |
| L. Superior, N. of Montreal river. | 131 | viii | Navigation at | 104 | B xiii |
| Larder Lake dist. | 210 | A xvi | Penck, Prof. A. | 144 | vii |
| McConkey tp. | 170 | ix | Penetanguishene, TINY TP., SIMCOE CO. | | |
| Molybdenite lake, Michipicoten div | 354 | A xiv | Brickyard at | 99, 100 | B xv |
| Notes on by Miller | 234 | vi | Drift around | 109 | B xiii |
| Salem dist., Madras pres. | 232 | viii | Island opposite, character of.... | 67 | i |
| Tip-top mt., Michipicoten div.... | 142 | viii | Penewabacong river, L. HURON. | | |
| Ural mts | 235 | viii | <i>See</i> Blind river. | | |
| Pekangoming lake, TURTLE RIVER, R. R. D. | 127 | vii | Penfield, Prof. S. L. | | |
| Pekin, NIAGARA CO., N.Y. | | | Analysis by, of pentlandite.... | 159 | c xiv |
| Experiments at, on peat | 197 | i | Sperrylite named by | 282 | xii |
| Pelée Gas and Oil Co. | | | Views of, on folgerite, Sudbury dist. | 281 | xii |
| Work by, 1895 | 5 | v | | 160 | c xiv |
| island, L. HURON. | | | Pengilly, F. C. | | |
| Anticline beneath | 105 | ix | Cyanider, Mikado mine | 64, 66 | viii |
| Limestone quarries at | 101 | i | Manager | 53-56 | ix |
| analysis and notes | 41-43 | B xiii | resignation | 77 | x |
| <i>See also</i> Anderdon. | | | John | 152 | ix |
| Oil in, boring for | 5, 25 | v | Penhallow, Prof. D. P. | | |
| log | 117 | A xiv | Views of, on age of marine fossils in Ontario | 226 | x |
| production, 1906 | 24 | A xvi | Peninsula, L. SUPERIOR, TH.B.D. | | |
| pt., L. ERIE. | | | Beach at, height of | 193 | vii |
| Borings at, for gas | 20 | x | Building-stone quarries near.... | 113 | vi |
| proposed | 105 | ix | Description of vicinity | 133 | vii |
| Peletard ? | | | Iron sand near | 83 | vii |
| Ref. to map by, of New Caledonia | 149 | ii | mining | 142 | xi |
| | | | | 87 | ix |

| | Page. | Vol. | | Page. | Vol. |
|--|----------|------|---|-----------|-------|
| Peninsula. — <i>Con.</i> | | | Penrose, R. A. F. | | |
| Pleistocene deposits near | 111 | vi | Paper by, on Apatites of Canada. | 436-443 | RC |
| Rocks at and near.....135, 167 | | viii | Pens (steel nibs). See Nibs. | | |
| nepheline-syenite | 208 | xi | Pense, E. J. B. | 178 | iii |
| shewn at Buffalo. 87 | | xi | <i>Pentamerella arata.</i> | | |
| petrography.....147-149 | | vii | Anderson tp..... | 125 | xi |
| lake, MISSISSAGI RIVER, ALG. | | | <i>Pentamerus.</i> | | |
| Description of..... | 167 | xii | Abitibi river..... | 187 | viii |
| Peninsular gold mine, MANITOBA | | | Nassagaweya tp..... | 57 B | xiii |
| LAKE REG., R. R. D..... | 92 | xii | " <i>oblongus.</i> | | |
| Mg. and Development Co. | | | Esquesing tp..... | 58 B | xiii |
| Capital and date of charter | 12 | vii | Hamilton, near..... | 123 B | xiii |
| Oil and Gas Co. | | | Sydenham tp..... | 49 B | xiii |
| Capital and date of charter | 37 A | xiii | Thorold..... | 117 B | xiii |
| Penn Cobalt Mining Co. | | | Pentila, Michael | 25 A | xiv |
| Capital and date of charter | 28 A | xvi | Pentlandite. | | |
| Pennock, Homer | | | Composition of..... | 168, 170 | ii |
| Tin swindle by | 139 | viii | Notes by Goodwin | 213 | vi |
| Pennsylvania, U.S. | | | Sudbury dist. | 278 | xii |
| Brick pavements in cities of | 108 | iii | 14, 15 C | xiv | |
| Coal in, anthracite, analysis..... | 5 Bull. | ii | analysis | 159 C | xiv |
| quality | 163 | vi | Worthington mine. | 206 | ix |
| calorific power..... | 233 | xii | 31 C | xiv | |
| production, 1888..... | 207 | ii | Peoria, PEORIA CO., ILL. | | |
| Corundum in | 525 | RC | Brick pavement of | 112 | iii |
| Diamond drill used in, 1870..... | 241 | viii | Pepperwell, SOUTH OF BOTHWELL. | | |
| Geological Survey of, notes by | 164 | iii | Notes on, by Newell..... | 23, 24 | vi |
| Walker..... | 422 | RC | Perak state, STRAITS SETTLEMENTS. | | |
| Iron ores of..... | 474 | RC | Mining royalties in | 43 | i |
| industry, paper on..... | 118 | ii | Perch. | | |
| production, cost. | 402 | RC | Abitibi dist | 127 A | xiii |
| royalties on..... | 10 | i | river | 253 A | xiv |
| Mining lands in, notes on tenure. | 12 | ii | Larder and Headquarters lakes.. | 221 | xi |
| Moraine in..... | 123, 124 | ix | lake, SEINE RIVER, R. R. D. | | |
| Natural gas in | 151, 152 | RC | Description by Blue..... | 149 | v |
| 114, 115, 146, 149 | | i | Minor ref. to..... | 69 | v |
| exhaustion..... | 158, 210 | i | Percy, Dr. | | |
| Oil in | 141 | i | Experiments by, on nickel-al- | | |
| quality | 162, 163 | RC | loys | 382, 383 | RC |
| Paleozoic rocks of | 5 | RC | ref. to..... | 165 C | xiv |
| Portage and Chemung formation | | | Notes by, on:— | | |
| in | 47 | RC | iron smelting | 356, 357 | RC |
| Shales of, analyses | 120 | iii | metallurgy of steel..... | 362, 363 | RC |
| Cobalt Silver Mines. | | | peat fuel | 208 | ii |
| Capital and date of charter | 29 A | xvi | island, L. TIMISKAMING | 85 B | xiii |
| Feldspar Co. | | | Mining Co. | | |
| Notes on operations of, 1902 | 137 | xii | Capital and date of charter | 12 | vii |
| Operating, 1902 | 38 | xii | tp., NORTHUMBERLAND CO. | | |
| 1903..... | 21 A | xiii | Gravel deposits in. See Wark- | | |
| 1905 | 102 A | xv | worth. | | |
| Steel Co. | | | Peridot. See Chrysolite. | | |
| Analysis by, of iron ore, Bel- | | | Peridotite. | | |
| mont tp..... | 60 | ii | Abitibi dist., petrographical | | |
| Tube Works, PITTSBURG. | | | notes..... | 211 A | xiv |
| Iron output of, 1893 | 119 | ii | Appalachian mts..... | 242 | viii |
| Labour employed by, statistics.. | 370 | RC | New Caledonia..... | 147, 148, | 154 C |
| University. | | | Sudbury dist | 121 C | xiv |
| Notes on, by Richards..... | 512 | RC | <i>Perisorens canadensis.</i> See Canada Jay. | | |
| Penny, H. L. | 105 | vii | Peristerite. See Albite. | | |
| Penokee and Gogebic Con. Mines. | | | Perley, George H. | 23 A | xiv |
| Bankruptcy of..... | 146 | iii | Permian system. | | |
| Gogebic dist., MICH. AND | | | Definition of..... | 539 | RC |
| Wis. | | | Perrault, P. E. | 105 | vii |
| Geological nomenclature of..... | 271 A | xiv | Perry, E. W. C. | 63 A | xv |
| Geology of, paper by Coleman .. | | | F. L..... | 143 | x |
| 195-199 | | x | 75 | | xi |

| | Page. | Vol. | | Page. | Vol. |
|--|------------|--------|---|---------------|--------|
| Perry, Frank M. | | | Petawawa river, OTTAWA RIVER. | | |
| Manager, Superior Copper Mg. | | | Mica on..... | 151 | R C |
| Co..... | 274 | xi | Nomenclature of..... | 220 | i |
| | 100 | xii | Waterpower of..... | 252 | vii |
| | 38, 41, 62 | xiv | Peter (INDIAN CHIEF). | | |
| | 72 | A xvi | Minor ref. to..... | 115 | v |
| R. I. | 143 | x | Notes on, by Blue..... | 134, 135 | v |
| | 75 | xi | Photo of..... | 80, 81 | vi |
| W. F. | 195 | viii | Bell Iron Co. | | |
| | 117 | ix | Iron mining by, McNab tp..... | 141 | R C |
| bay, KARENUNG LAKE, ALG. | | | Bell iron mine, BATCHAWANA | | |
| Iron formation on and near..... | 315, 330 | A xiv | BAY, L. SUPERIOR..... | 23 | R C |
| mill, MARBLE LAKE, FRONTENAC | | | Peterboro, N. MONAGHAN TP., PETER- | | |
| CO. | | | BORO CO. | | |
| Rocks at and near..... | 186, 202 | xi | Beet-sugar factory at, built of | | |
| rapid, MISSISSIPPI RIVER, ONT. | | | limestone..... | 4 | B xiii |
| Gold mining near, <i>See</i> Star of | | | Brick-yard at, analysis of clay | | |
| the East mine. | | | used in..... | 15 | B xv |
| tp., P. S. D. | | | notes and photo. 94, 95 | 15 | B xv |
| Rocks in northern portion of.... | 171 | ix | Hydraulic lift-lock at, photo.... | 16, 17 | B xiii |
| Persia. | | | Natural gas at, boring for, pro- | | |
| Arsenical ores in..... | 102 | xi | posed..... | 21 | x |
| Perst, RUSSIA. | | | co. | | |
| Peat manufactured at..... | 218 | ij | Corundum in..... | 207-230 | vii |
| Perth, DRUMMOND TP., LANARK CO. | | | sketch map showing..... | 207 | vii |
| Apatite deposits in vicinity of. | | | County map of, inaccurate..... | 227 | A xiii |
| 53, 167, 177, 178 | | R C | Iron ores of, chromium in..... | 233 | vii |
| Brick-yard at, notes on..... | 76 | B xv | Limestone in, notes by Miller... | 97 | B xiii |
| Fossil tracks at..... | 40 | R C | lake, PETERBORO CO. | | |
| Mica mining near..... | 290 | xi | Iroquois beach on..... | 233 | A xiii |
| | 84 | A xiv | Peterborough Peat Co. | | |
| | 106 | A xv | Capital and date of charter..... | 5 | xii |
| | 23 | A xvi | Sandstone Brick Co. | | |
| works at..... | 135 | x | Capital and date of charter..... | 26 | A xv |
| | 28, 291 | xi | Peters, Alfred. | 134 | viii |
| | 85 | A xiii | Dr. Edward D. | | |
| Peat bog near, analyses and notes. | | | Evidence by, before R. C. re: | | |
| 203, 204 | | xii | Canadian Copper Co..... | 103, 104 | R C |
| photo of works... 208 | | xii | mining laws..... | 310 | R C |
| Perthite first found at..... | 188 | ii | Sudbury nickel mining.... | 404, 405 | R C |
| named after..... | 225 | vi | tariffs..... | 232 | R C |
| Spodumene near..... | 210 | ix | German system of smelting fav- | | |
| Amboy, MIDDLESEX CO., N. J. | | | oured by..... | 374 | R C |
| Reduction works at..... | 11 | A xvi | Millerite found by, Copper Cliff m. | 281 | xii |
| co. | | | | 159 | C xiv |
| Limestone in, Corniferous..... | 25 | B xiii | Notes by, on blast furnace smelt- | | |
| notes by Miller... 95 | | B xiii | ing..... | 376 | R C |
| mica mine, N. BURGESS TP., | | | Paper by, on smelting copper- | | |
| LANARK CO. | | | nickel ores..... | 234-236 | i |
| Description and section of..... | 148 | R C | Photo of..... | 136 | C xiv |
| Perthite. | | | Work by, Sudbury dist..... | 379 | R C |
| Analysis and occurrences..... | 206 | ix | | 50, 139, 140 | C xiv |
| Composition of..... | 225 | vi | J. | 198 | R C |
| For sleeve links, brooches, etc.. | 188 | ii | William | | |
| North Burgess tp..... | 194 | ii | Manager, Bad gold m..... | 56 | vii |
| | 206 | ix | Mill manager, Empress gold | | |
| Peru. | | | m..... | 110, 111, 264 | vi |
| Apatite in guano beds of..... | 441 | R C | Harold Lake gold m..... | 69 | v |
| Nickel coinage in..... | 161 | ii | Hillier gold m..... | 156 | v |
| claim, MICHIPICOTEN DIV., | | | Kenora Reduction works.. | 98 | viii |
| ALG. | 113 | x | lake, NOISY RIVER, L. SUPERIOR. | | |
| | 73 | xi | Rocks on and near..... | 202, 205 | A xv |
| Petalite. | | | Iron formation.... | 178, 204 | A xv |
| Toronto..... | 194 | ii | Petersen, E. | 236 | v |
| | 206 | ix | Frank | | |
| Utöe island, Sweden: Elba; and | | | Manager, Black Eagle gold | | |
| Bolton, Mass..... | 472 | R C | mine..... | 16, 80, 254 | xi |
| | | | Manhattan gold mine. 274 | | viii |
| | | | | 71 | ix |
| | | | | 83, 84 | x |

| | Page. | Vol. |
|--|------------|------|
| Peterson, H. C. | 62 | ix |
| O. | 143 | x |
| Peter W. | 54, 57 | xi |
| Ref. to work by, on iron ore concentration..... | 341 | xii |
| lake, COLEMAN TPL, NIP. | | |
| Diabase on, character..... | 27 B | xiv |
| Hydraulic plant on..... | 79 A | xv |
| photo..... | 81 A | xv |
| Keewatin near..... | 44 B | xiv |
| Silver veins on..... | 26 B | xiv |
| Lake Silver Cobalt Mg. Co. | | |
| Capital and date of charter..... | 29 A | xvi |
| Work by, 1905..... | 81 A | xv |
| Petite Nation river. See Nation river. | | |
| Petits Ecrits, L. SUPERIOR. | | |
| Terraces near, photo..... | 204, 205 | vii |
| Petitsikapau lake, LAB. | | |
| Analysis of anthraxolite from... | 162 | vi |
| Petoskey, EMMET CO., MICH | | |
| Limestone from, analysis..... | 13 B | xiii |
| for Sault Ste. Marie..... | 98 | xi |
| Petraia. | | |
| Gore Bay..... | 77 B | xiii |
| Petrie, D. C. | | |
| Gold mining by, Manitou Lake dist..... | 63 | ix |
| <i>Petrochlidon lunifrons.</i> See Swallow, cliff | | |
| Petrography. | | |
| Importance of, in testing rocks for building material..... | 136 | iii |
| Notes on, by Coleman..... | 145-150 B | vii |
| | 179-182 | ix |
| | | |
| Anorthosite, Seine River dist..... | 99, 100 | v |
| Breccia, Sudbury dist..... | 85 | i |
| Conglomerate, Seine River dist..... | 96-98 | v |
| Diabase, Silver islet..... | 105 | v |
| Sudbury dist..... | 77, 78 | i |
| Diorite, Foley tp..... | 99 | iv |
| Granite, Cobalt dist..... | 45 B | xiv |
| Seine River dist..... | 101 | v |
| Greywacké, Animikie iron range..... | 159 A | xv |
| Greenstone, Michipicoten div..... | 302 A | xiv |
| Heronite..... | 187-189 | ix |
| Limestone, Opasatika river..... | 150 A | xiii |
| Micro-norite group, Sudbury dist..... | 214, 215 A | xiii |
| Nepheline-syenite, Hastings dist..... | 250-253 | viii |
| Pegmatite, Ural mts..... | 285 | viii |
| Phyllites, Michipicoten div..... | 310 A | xiv |
| Quartzite, Aberdeen tp..... | 77 A | xiii |
| Quartz-porphry schist, Michipicoten div..... | 303, 304 A | xiv |
| Syenite, L. Superior..... | 211 | ix |
| | | |
| Various rocks from the following: | | |
| Abitibi dist..... | 116-121 A | xiii |
| | 209-212 A | xiv |
| Blanche River dist..... | 228, 229 | xi |
| Iron ranges, Animikie..... | 158-168 A | xv |
| Negaunee, Mich..... | 151 | ix |
| Ontario..... | 204-210 | x |
| northwestern..... | 143-147 | xi |

| | Page. | Vol. |
|---|------------|------|
| Petrography.—Con. | | |
| Lake of the Woods..... | 121-124 | vi |
| Mattagami valley..... | 132-135 A | xv |
| Michipicoten div..... | 175-184 | xi |
| | 340-355 A | xiv |
| Minnitaki Lake dist..... | 95, 96 | v |
| Mississagi River dist..... | 169-171 | xii |
| Moose River basin..... | 139-141 A | xiii |
| Nipigon Lake dist..... | 129, 130 A | xvi |
| North of Lake Huron and Superior, Huronian areas..... | 169-174 | viii |
| Parry Sound dist..... | 180-182 | ix |
| Rainy Lake dist. paper by Coleman..... | 77-96 | iv |
| Shebandowan Lake dist., notes by Coleman..... | 95, 96 | v |
| Sturgeon lake, Th. B. d..... | 105, 106 | xii |
| Sudbury dist..... | 289-298 | xii |
| | 208-213 A | xiii |
| | 107-134 C | xiv |
| Thunder Bay dist..... | 179, 180 | ix |
| Wabigoon Lake reg..... | 182, 183 | vii |
| | | |
| Petrolea, ENNIS-KILLEN TPL, LANBTON CO. | | |
| Brick-yard at, notes..... | 74 B | xv |
| Corniferous formation at, thickness..... | 47 | RC |
| Hamilton formation at, thickness..... | 112 A | xiv |
| Lower Helderberg formation at, thickness..... | 96 A | xiv |
| Oil at and near..... | 24 | v |
| area..... | 111, 114 A | xiv |
| boring for..... | 18 | x |
| records..... | 113 A | xiv |
| wells, number..... | 25 | v |
| | 89, 90 A | xiv |
| early experiences..... | 165 | RC |
| evidence before R. C. 55, 153-156, 159, 161 | | RC |
| exchange, organization..... | 161 | RC |
| industry, 1895..... | 5 | v |
| 1899..... | 107 | ix |
| 1901..... | 40, 41 | xi |
| prices, 1895..... | 23 | v |
| production 1891-94..... | 26 | iv |
| 1893..... | 9 | iii |
| 1895..... | 21 | v |
| 1905..... | 108 A | xv |
| 1906..... | 23, 24 A | xvi |
| refining works..... | 40 | xii |
| Onondaga formation at, thickness..... | 96 A | xiv |
| Portage-Chemung formation N. of..... | 99 A | xiv |
| Salt at, boring for..... | 186 | RC |
| evidence before R.C..... | 55 | RC |
| Trenton formation at..... | 113 A | xv |
| | | |
| Oil Co. | | |
| Works of, notes by Blue..... | 27 | v |
| | | |
| Petrosilex. | | |
| Definition of..... | 539 | RC |
| | | |
| Petroleum. See Oil. | | |
| Petrolia Crude Oil Tanking Co. | | |
| Notes on, by Noble..... | 165 | RC |
| Operating, 1897..... | 17 | vii |
| | | |
| Gas Co. | | |
| Capital and date of charter..... | 26 A | xv |
| Pettet, W. F. | 105 | viii |

| | Page. | Vol. | | Page. | Vol. |
|--|------------|------|---|----------|------|
| Pettigrew, W. D. | | | Phillips mine, MICHIGICOTEN ISLAND. | | |
| Gold mining by, Seine River dist. | 93 | viii | See Phillips, G. A. | | |
| | 35, 79, 80 | ix | Mining Supply Co. | 120 | ii |
| Pettit, R. | 143 | x | Nimick & Co. | | |
| | 75 | xi | Iron output, 1893..... | 120 | ii |
| | 67 | xii | Labour employed by, statistics.. | 370 | R C |
| | 49 A | xiii | <i>Phillipsastraea billingsii</i> . | | |
| <i>Petula pappracea</i> . See Birch, white | | | Cayuga N. tp..... | 146 | xii |
| Pewabic, L. SUPERIOR, U. S. | | | Rockford..... | 143 | xii |
| Hematite at, treatment of..... | 338 | xii | " <i>gigas</i> . | | |
| lake, R. R. D. | | | Kwataboahagan river..... | 181 A | xiii |
| Iron formation near..... | 130 | xi | " <i>vernuli</i> . | | |
| Pewee, wood | | | Kwataboahagan river..... | 181 A | xiii |
| Abitibi dist..... | 126 A | xiii | Anderdon tp..... | 124 | xi |
| Peyton (PATON) copper mine, | | | Phillipsburg, N. J. | | |
| WHISKEY LAKE, ALG. | | | Paving clay from, analysis..... | 120 | iii |
| Minor rel. to..... | 86 | xi | " Philomel " H. M. S. | 218 | i |
| Notes on..... | 65, 66 A | xiv | Phinney, Dr. A. J. | 151 | R C |
| Pfau, Fred. | 96 | xii | Phippen, S. H. | 99 | vii |
| | 58 A | xv | Phlogopite. | | |
| <i>Phacops halia</i> . | | | Analysis of..... | 83 A | xiv |
| Anderdon tp..... | 125 | xi | Composition and description of. | 226 | vi |
| Cayuga N. tp..... | 146 | xii | Occurrences of. See Mica. | | |
| Springvale..... | 144 | xii | <i>Phoca grandaudica</i> . | | |
| " <i>crustula</i> . | | | Greens creek, near Ottawa..... | 224 | x |
| Kwataboahagan river..... | 190 A | xiii | Phoebe (BIRD). | | |
| " <i>etna</i> . | | | Abitibi dist..... | 126 A | xiii |
| Cayuga N. tp..... | 146 | xii | Phoenix Gold Mfg. Co. | | |
| Springvale..... | 144 | xii | Capital and date of charter..... | 9 | xii |
| Stony pt., L. Huron..... | 155 | xii | Phoenixville, U. S. | | |
| <i>Phegopteris depauperis</i> . | | | Copper smelting at..... | 377 | R C |
| Mattagami valley..... | 151 A | xv | Pholerite. | | |
| Phelan, DOWLING TIE, ALG. | | | Mode of occurrence..... | 207 | ix |
| Nickel-bearing eruptive near.... | 210 A | xiii | <i>Pholidostrophia iowacensis</i> . | | |
| siding, NEAR OSAPING, ALG. | | | Theedford..... | 154 | xii |
| Beach at, altitude..... | 103 C | xiv | Phosphate of lead. See Pyromorphite. | | |
| Gravel plain around..... | 106 C | xiv | lime. See Apatite. | | |
| Philadelphia, U. S. | | | Phosphorus. | | |
| Brick pavements in..... | 108, 109 | iii | Description of..... | 448 | R C |
| Coal gas of, quality..... | 163 | iv | Effect of, on iron ores..... | 364, 467 | R C |
| production..... | 164 | iv | | 88 | ii |
| Nickel exhibited at, 1876..... | 381 | R C | Elimination of, from iron ores. 91, 92 | | ii |
| | 135 | ii | Great Britain, in iron ores..... | 87, 88 | ii |
| and Reading Coal Co. | 42 | i | Percentage of, in coal, coke and | | |
| Philip, W. Marshall. | 48 | ix | charcoal..... | 483 | R C |
| Edward island, GEORGIAN BAY, | | | Photogen. | | |
| L. HURON. | | | Peat for..... | 215 | ii |
| Rocks on..... | 68 | i | <i>Phryganica cjecta</i> . | | |
| portage, OPASATIKA RIVER.... | 136 A | xiii | Greens creek, near Ottawa..... | 224 | x |
| Phillebeck, A. | 167 | iii | Phyllites. | | |
| Phillips, Alexander | 29 | ix | Bath island, L. of the Woods... 104 | | vi |
| Arthur | | | Michipicoten div., notes by J. M. | | |
| Views of, origin of metalliferous | | | Bell..... | | |
| veins..... | 172 | i | 306, 307, 343, 344 A | xiv | |
| Prof. Francis C. | | | petrography..... | 310 A | xiv |
| Analysis of gas, Welland co..... | 106 | ix | | 183 | vii |
| bituminous coal..... | 166 | vi | <i>Physa arpis opulifolius</i> . | | |
| George A. | | | Mattagami valley..... | 150 A | xv |
| Copper mining by, Michipicoten | | | Pic Copper and Gold Mining Co. | | |
| island..... | 60 | R C | Capital and date of charter..... | 9 | x |
| | 113 | viii | island, L. SUPERIOR. | | |
| Iron mining by, near Madoe.... | 32 | viii | Devonian pebbles near..... | 157 | viii |
| J. Arthur | | | Syenitic rocks on..... | 208 | xi |
| Notes by, on calorific power of | | | with nepheline... 205 | | ix |
| carbon and hydrogen..... | 185 | i | Zircon on..... | 212 | ix |
| W. B. | | | river, L. SUPERIOR. | | |
| Ref. to work by, on treatment of | | | Gold mining on..... | 115 | R C |
| magnetic iron ores..... | 338 | ii | See also Heron bay. | | |

| | Page. | Vol. | | Page. | Vol. |
|--|------------|------|--|------------|------|
| Pic river. — <i>Con.</i> | | | Pickering tp., ONTARIO CO. | | |
| Iron ore on..... | 145 | R C | Nepheline-syenite in. <i>See</i> Port | | |
| 161, 183 | | ix | Union. | | |
| mining..... | 257 | viii | Picric acid. | | |
| 112 | | x | Composition of..... | 33 | v |
| Minor ref. to..... | 202 | x | Picrite. | | |
| Notes on, by Coleman..... | 135 | viii | Crow lake, R. R. d..... | 89 | vi |
| Rocks in and near..... | 167 | viii | Prosser tp..... | 211 A | xiv |
| Huronian..... | 124 | iv | Picrolite. | | |
| petrography..... | 148 | vii | Ross tp..... | 207 | ix |
| siliceous..... | 183 | ix | Pictet, R. | | |
| Silver near..... | 29 | R C | Experiments by, on acetylene | | |
| Waterpower on..... | 252 | vii | gas..... | 28 | vi |
| Picard, A. | 255 | ii | Pictographs. | | |
| lake, ALG..... | 63 A | xiv | Manitou lake..... | 87 | vi |
| <i>Picea alba.</i> <i>See</i> Spruce, white | | | Missinaibi..... | 187 | vii |
| " <i>balsamea.</i> <i>See</i> Balsam. | | | Picton, HALLOWELL TP., PRINCE ED- | | |
| " <i>nigra.</i> <i>See</i> Spruce, black | | | WARD CO. | | |
| " <i>nigra</i> var. <i>rubra.</i> | | | Brick-yard at, notes..... | 95 B | xv |
| Abitibi dist..... | 242 A | xiv | Country near, character..... | 240 A | xiii |
| Piche pt., L. TIMISKAMING. | | | Limestone from, analyses and | | |
| Rocks at and near..... | 86 B | xiii | quarries..... | 99, 100 B | xiii |
| quartzite and limestone, photo. | 49 B | xiv | Peat bog at, notes..... | 32 A | xiii |
| Pickands, Major | | | Co. formed to work..... | 25 | ix |
| Iron mining by, Atikokan range. | 72 | ii | Pictou, PICTOU CO., N. S. | | |
| Pickard pt., U. S. | | | Coal field of; iron mines of..... | 398 | R C |
| Analysis of tinguaita from... 189, 190 | | ix | Zinc-blende in..... | 210 | vi |
| Pickaud's Iron Co. | | | coal field, Pictou co., N. S. | | |
| Capital and date of charter..... | 9 | xii | As supplier for Ontario..... | 196 | ii |
| Pickerel. | | | Pie island, L. SUPERIOR. | | |
| Abitibi dist..... | 127 A | xiii | Basalt at..... | 62 | iii |
| 242, 253 A | | xiv | Metallic minerals on..... | 56 B | xiv |
| Headquarters lake, near Larder | | | Photo of..... | 148 | ix |
| lake..... | 221 | xi | Trap on..... | 37 | R C |
| Lake of the Woods..... | 97 | vi | 15 | | v |
| Mattagami River dist..... | 117, 131 A | xv | Piedmont, ITALY. | | |
| Michipicoten div..... | 297 A | xiv | Corundum in..... | 241 | viii |
| Nipigon Lake dist..... | 139 A | xvi | Nickel in..... | 146, 151 C | xiv |
| Rainy lake..... | 44 | iv | Pierce, Dr. H. M. | | |
| Round lake, Otto tp..... | 189 | xii | Process of, for charcoal furnaces. | | |
| lake, COLEMAN TP., NIP. | | | 481, 482 | | R C |
| Keewatin greenstone on..... | 42, 44 B | xiv | 100 | | ix |
| 52 A | | xvi | S. F. | | |
| 35 B | | xiv | gold mine, MARMORA TP., | | |
| Minor ref. to..... | | | HASTINGS CO..... | 236 | iv |
| lake, MANITOU RIVER, R. R. D. | | | Pierre Plat, L. SUPERIOR. <i>See</i> Pays | | |
| Dam south of..... | 122 | vii | Plat. | | |
| Minor ref. to..... | 83 | vi | <i>Pieris rapae.</i> <i>See</i> Cabbage, butterfly | | |
| Notes by Coleman..... | 62 | iv | Pig(s). | | |
| Rocks on..... | 78 | iv | Kept at Moose Factory..... | 107 | iv |
| granite..... | 50 | iv | Pigeon(s). | | |
| Keewatin..... | 67 | iv | Caribou island, L. Superior..... | 111 | v |
| petrography..... | 88, 89 | iv | Pigeon lake, HARVEY TP., PETER- | | |
| slate..... | 86 | iv | BORO CO. | | |
| lake, MICHIPICOTEN DIV. | | | Limestone on..... | 97 B | xiii |
| Character of country near..... | 200 A | xv | Trenton..... | 113 B | xiii |
| Glacial deposits near..... | 192 A | xv | lake, MONTREAL RIVER, NIP. | | |
| morainic hills..... | 201, 206 A | xv | Notes on, by Bell and Barlow..... | 82, 83 B | xiii |
| Granite hills on..... | 201 A | xv | Rocks on..... | 81 | i |
| Minor ref. to..... | 179 A | xv | lake, OMBABIKA RIVER, TN. B. D. | | |
| rapid, PICKEREL LAKE, R. R. D. | | | Porphyrite on, petrography..... | 209 | x |
| Gold prospecting near..... | 63 | iv | pt., MINN. | | |
| Pickering, W. H. | 245 | xi | Beaches S. of..... | 175 | ix |
| 55 A | | xiii | Silver-bearing formations near..... | 33 | R C |
| Pickering, PICKERING TP., ONTARIO CO. | | | portage, MANITOWICK LAKE, | | |
| Hudson River formation at..... | 43 | R C | ALG. | | |
| 126 B | | xiii | Moraine at..... | 9 Bull. | iii |
| Iroquois beach near..... | 230 A | xiii | Rocks at, description..... | 189, 190 | vii |
| | | | Sand plain near..... | 204, 205 | vii |

| | Page. | Vol. | | Page. | Vol. |
|---|------------|------|---|---------------------|------|
| Pigeon rapid, MANITOWICK LAKE, ALG. | | | Pikitiigushi (Pikitiigouching), NIPIGON LAKE, TH. B. D. | | |
| Fall of | 190 | vii | Marl from, analysis | 111 B | xiii |
| Pigeon (Omeemeer) rapid, MATTAGAMI RIVER, ALG. | | | Pilgrim, H. C. | 174 | ii |
| Gold at | 140 | ix | Pilkie, R. | 117 | ix |
| Minor refs. to | 127, 128 | ix | | 143 | x |
| rapid, MICHIPICOTEN RIVER, ALG. | | | Pilkington tp., WELLINGTON CO. | | |
| Moraine deposits at | 192 A | xv | Gas well in | 110 A | xv |
| river, MINN. AND R. R. D. | | | Guelph formation in | 121 B | xiii |
| Animikie formation on | 32 | R C | analysis | 122 B | xiii |
| Character of | 199 | v | Oil in, boring for | 24 A | xiii |
| Distance from mouth of, to L. St. Joseph | 192 | v | Pilley island, NOTRE DAME BAY, NEWFOUNDLAND. | | |
| Keweenaw series on | 66 | R C | Pyrites on | 192 A | xvi |
| Iron on and near | 144 | R C | <i>Pilocras.</i> | | |
| notes by Coleman | 128-134 | xi | Kingston Mills | 59 B | xiii |
| Section from (hypothetical) across L. Superior | 77 | iii | Pilot harbour, L. SUPERIOR. | | |
| Trap from, to Kaministiquia river | 37 | R C | Rocks on and near:— | | |
| river, MONTREAL RIVER. | 176, 177 | vi | conglomerate | 166 | viii |
| Pihuamo, JALISCO STATE, MEXICO. | | | granite | 349 A | xiv |
| Cobalt ores in | 71 B | xiv | Keweenaw | 166 | viii |
| Pike. | | | Pimm, C. | 117 | ix |
| Abitibi dist. | 108, 127 A | xiii | Pinchin, S. | | |
| | 242, 253 A | xiv | Drowned | 58 A | xv |
| Headquarters lake, near Larder lake | 221 | xi | Manager, Combined gold mine .. | 48 A | xiv |
| James Bay tributaries | 133 | iv | Part owner, Baden Powell gold mine | 96 | x |
| Mattagami River dist. | 117, 131 A | xv | Pine & Co. | | |
| Kamiskotia lake | 119 A | xv | Phosphate mining by, Bedford tp. | 245 | i |
| Michipicoten div. | 297 A | xiv | Pine. | | |
| Mississagi river | 172 | xii | Calorific power of | 54 B | xv |
| Nipigon Lake dist. | 139 A | xvi | Distribution of | 119 | iv |
| Round lake, Otto tp | 189 | xii | Minnesota | 166 | v |
| Voracious habits of | 139 A | xvi | On mining lands, laws regarding. | 226 | ix |
| Welcome lake, Nip. | 170 | vi | | | |
| claim, NEAR NET LAKE, TIMAGAMI REG., NIP. | | | | | |
| Notes on, by Coleman | 172 | ix | Blanche river | 215 | xi |
| lake, GLAMORGAN TP., HALIBURTON CO. | | | Frederick House Lake dist | 124 A | xiii |
| Titaniferous iron ores on | 62 | ii | Lake of the Woods | 14 | iii |
| lake, N. BURGESS TP., LANARK CO. | | | Kenora | 168, 170 | v |
| Limestone and iron on | 49 | ii | Whitefish bay | 185 | v |
| Mica mining on | 277, 278 | v | Little Missinaibi lake | 140 | ix |
| | 132 | x | Loring, near | 170 | ix |
| lake, MICHIPICOTEN DIV., ALG. | | | McCann tp. | 249 A | xiv |
| Gravel plains near | 177 A | xv | Mattagami lake, near | 130 | ix |
| Iron mine near | 203 | viii | river | 127 | ix |
| Rocks on | 202 A | xv | Michipicoten div. | | |
| Lake mica mine, NEAR MICAVILLE. | | | Batchawana bay | 68 | iii |
| Notes on, 1900 | 132 | x | | 128 | viii |
| 1901 | 286 | xi | exhausted | 200 A | xvi |
| 1902 | 128 | xii | Mamainse pen | 72 | iii |
| river, BLACK RIVER, ABITIBI RIVER. | | | Mississagi River dist. | 159, 163, 166, 167, | xii |
| Glacial striae on | 115 A | xiii | | 166, 167, | 172 |
| Minor ref. to | 114 A | xiii | Night-hawk river, photo., Facing Niven's base line and S. of, Alg. | 184 | viii |
| Photo of portion | 128, 129 A | xiii | Pigeon River dist. | 147 | ix |
| Porphyry on | 120 A | xiii | Pishkanogama lake, Alg. | 134 | ix |
| Rapids and driftwood on | 187 | xii | Port Arthur, west of | 205 | v |
| Pikes peak, COLORADO, U.S. | | | Rainy lake | 162 | v |
| Arlazon stone at | 225 | vi | river | 207 | R C |
| | | | | 117 | iv |
| | | | Red Sucker creek, Abitibi river. . | 184 | viii |
| | | | Shebandowan Lake dist. :— | | |
| | | | Lac des Milles Lacs | 136 | v |
| | | | Moss tp. | 79, 121 | v |
| | | | Round lake | 118 | v |
| | | | Spanish river | 125, 126 | ix |

| | Page. | Vol. |
|--------------------------------------|--------------------|----------|
| Pine. — <i>Con.</i> | | |
| Sudbury dist. | 7, 106 | C xiv |
| Trill tp. | 193 | A xiii |
| Vermilion river. | 258 | vii |
| Timiskaming lake, west of. | 5 | A xiv |
| Wabigoon lake, near. | 171, 172 | vii |
| Windigoostigwan river. | 139 | v |
| Banksian, Jack or Pitch | | |
| Abitibi dist. | 108, 109, 124-126 | A xiii |
| 197, 216, 218, 224, 227-235, 242, | | |
| 249, 252 | A xiv | |
| Black river and tribs. | 184-188 | xii |
| for railway-ties. | 207 | A xiv |
| Agawa river. | 131 | viii |
| Albany river (north). | 120 | iv |
| Blanche river. | 173, 174, 181, 183 | xii |
| Kenogami lake. | 176-182 | xii |
| Fort Mattagami, photo. | 219 | A xiv |
| Gypsum mt., Alg.-Nip. | 146, 158 | A xiii |
| Hudson Bay slope. | 176 | vi |
| Lac Seul. | 62 | v |
| Lake Huron slope. | 170 | vi |
| Matawin river. | 132 | v |
| Mattagami valley. | 181 | x |
| 105, 122 | A xiii | |
| 118, 119, 127 | A xv | |
| diameter. | 139, 140 | A xv |
| Michipicoten div. | 206 | vii |
| 137 | viii | |
| 295 | A xiv | |
| area. | 13 | Bull iii |
| Dog river. | 290 | A xiv |
| Maggie river. | 200 | vii |
| Mississagi River dist. 158-161, 166, | 172 | xii |
| Montreal River basin. | 173 | vi |
| Moose River basin. | 176 | A viii |
| Nipigon Lake dist. | 111, 112 | iv |
| 212 | x | |
| 138 | A xvi | |
| Port Arthur and vicinity. | 114 | ii |
| Rainy River dist. | 181 | vii |
| Rainy Lake dist. | 95 | iv |
| Shebandowan Lake dist. | 130 | v |
| Speight's meridian line, E. of L. | | |
| Superior. | 200 | vii |
| Sudbury dist. | 106 | C xiv |
| Sweden, for iron making. | 396 | R C |
| Timagami Lake dist. | 56 | R C |
| Wabigoon lake (near). | 171 | vii |
| Norway or Oregon | | |
| Abitibi dist. | 126 | A xiii |
| 207 | A xv | |
| Little Wabigoon river. | 126 | vii |
| Matabitchuan river. | 58 | R C |
| Savant lake. | 89 | xii |
| Seine River dist. | 137, 140, 145, | |
| 148-151 | v | |
| 91 | viii | |
| Thunder cape. | 146 | vi |
| red | | |
| Abitibi Lake dist. | 242 | A xiv |
| Blanche river. | 175 | xii |
| Ground-hog River dist. | 115 | iv |
| Hudson Bay slope. | 176 | vi |
| 176 | A xiii | |
| Lac Seul. | 62 | v |
| Lake of the Woods, Kenora. | 168 | v |
| Mattagami valley. | 18 | ix |
| 124 | A xv | |

| | Page. | Vol. |
|---|---------------|---------|
| Pine, red. — <i>Con.</i> | | |
| Michipicoten div. | 206 | vii |
| 296 | A xiv | |
| Mississagi River dist. | 160, 163 | xii |
| Nipigon Lake dist. | 111 | iv |
| Rainy Lake dist. | 95 | iv |
| Rainy river. | 208 | v |
| Wabigoon lake, near. | 171, 172 | vii |
| Savant lake. | 88 | xii |
| Timagami Lake dist. | 56 | R C |
| White Bear lake. | 174 | ix |
| white | | |
| Abitibi dist. | 108, 126 | A xiii |
| 207, 223 | A xiv | |
| Black river and tribs. | 184 | xii |
| Blanche river and vicinity. | 175-179 | xii |
| Ground-hog River district. | 115 | iv |
| Hudson Bay slope. | 176 | vi |
| Lac Seul. | 62 | v |
| Lake Huron slope. | 169, 170 | vi |
| Mattagami valley. | 181 | x |
| 119, 120 | A xv | |
| Michipicoten div. | 206 | vii |
| 296 | A xiv | |
| Mississagi river. | 161 | xii |
| Nipigon Lake dist. | 111 | iv |
| Rainy River dist. | 65 | R C |
| 208 | v | |
| Rainy Lake dist. | 95 | iv |
| Sandy lake. | 172 | vii |
| Savant lake. | 88 | xii |
| Speight's meridian line, E. of L. | | |
| Superior. | 130, 201, 202 | viii |
| Timagami Lake dist. | 57 | R C |
| White Bear lake. | 174 | ix |
| borer. | | |
| Abitibi dist. | 128 | A xiii |
| Burnt trees killed by. | 97 | iv |
| lake, KENOGAMI RIVER, ALBANY | | |
| RIVER. | | |
| Dolomite from, petrography. | 210 | x |
| Lake iron mine, GLAMORGAN | | |
| TP., HALIBURTON CO. | | |
| Notes on, by C. J. Pusey. | 132 | R C |
| Lake iron mine, VICTORIA CO. | | |
| Titanium in ore of. | 337 | xii |
| pt., LAC DES MILLE LACS, | | |
| TH. B. D. | | |
| Rocks at. | 72 | vi |
| portage, HAWK RIVER, MICHIPICOTEN DIV., ALG. | | |
| Character of. | 197 | vii |
| portage, NIPIGON RIVER, TH. | | |
| B. D. | | |
| Length of. | 107 | A xvi |
| Portage bay, L. OF THE WOODS, | | |
| R. R. D. | | |
| Gold mining on and near. | 232, 233 | ii |
| 25 | iv | |
| 96, 97 | vi | |
| <i>See also</i> Gold creek. | | |
| Portage gold mine, L. OF THE | | |
| WOODS, R. R. D. | | |
| Character of ores. | 114, 116 | 119 R C |
| Date, 1892. | 233 | ii |
| Notes on. | 26, 27 | iii |
| 97 | vi | |
| Road from, to Hilly lake. | 34 | vii |

| | Page. | Vol. | | Page. | Vol. |
|--|-------------|------|--|---------------|------|
| Pine Portage Mining Co. | | | Pitchpine lake, MICHIGICOTEN DIV. | | |
| Capital and date of charter | 9 | x | Minor ref. to | 290 A | xiv |
| Evidence before R. C. | 64, 114-119 | R C | Rocks on and near :— | | |
| Prospecting by | 26 | R C | agglomerate | 342 A | xiv |
| river, RAINY RIVER. | 167 | v | greenstone | 302 A | xiv |
| Pinkerton, William | 61 | ix | iron-bearing | 314, 322 A | xiv |
| <i>Pinus banksiana</i> . See Pine, Banksian | | | quartz-porphry | 344 A | xiv |
| " <i>resinosa</i> . See Pine, red | | | Pitchstone. | | |
| " <i>strobus</i> . See Pine, white | | | Michipicoten island | 194 | ii |
| Pinze, A. and J. | 143 | x | | 145 | ix |
| | 75 | xi | Missinaibi (near) | 187 | vii |
| Pioneer Copper Co. | | | Pither, R. J. | | |
| Work by, Bruce Mines dist. | 271 | xi | Indian agent, Fort Frances. | 64, 118 | R C |
| iron mine, ELY, U.S. | | | Notes by, re H. R. C. post at | | |
| Jasper on surface of | 175 | xi | Kenora | 171 | v |
| Minor ref. to | 152 | ix | pt., RAINY LAKE, R. R. D. | | |
| Notes on | 175 | xi | First, Fort St. Pierre, <i>which see</i> . | | |
| island, L. OF THE WOODS, R. | | | Historical notes re | 162 | v |
| R. D. | | | Length of river from | 166 | v |
| Gold mining on, 1904. | 48, 49 A | xiv | Trees at | 161 | v |
| 1905. | 54 A | xv | Pithom, EGYPT. | | |
| Mg. Co. | | | Bricks of | 107 | iii |
| Capital and date of charter | 26 A | xv | Pitkaranta, FINLAND. | 329, 331, 338 | xii |
| Formation of, proposed | 48 A | xiv | Pittasphalt. See Maltha. | | |
| Pipe river, L. SUPERIOR, TH. B.D. | 284 A | xiv | Pitti palace, FLORENCE, ITALY. | | |
| | 316 A | xiv | Built of conglomerate | 134 | iii |
| Pipes, Indian | | | Pitts, Rev. F. E. | 44 A | xv |
| Stone for | 76 | iv | Pittsburg, Pa. | | |
| Cabot head. | 35 B | xiii | Brick pavement in | 108 | iii |
| Pipestone lake. | 46, 85 | iv | Iron trade at and near | 118-120 | ii |
| steam | | | | 146 | iii |
| Mica for covering, notes by Blue. | | | blast furnaces. | xx | R C |
| 31, 32 | | v | | 125, 127 | ii |
| Pipestone. | | | cost of production. | 389 | R C |
| L. of the Woods, near Long pt. | 114 | vii | | 33, 34 | x |
| Gold Mg. Co. | | | labour statistics. | 369 | R C |
| Capital and date of charter | 12 | vii | Natural gas near | 121 | i |
| lake, MAXITOU LAKE DIST, R. | | | Bridge Works. | 119 | ii |
| R. D. | | | Cobalt Co. | | |
| Iron pyrites on | 175 A | xvi | Capital and date of charter | 26 A | xv |
| Pyrrhotite on. | 61, 74 | iv | Forge and Iron Works. | | |
| Rocks on | 50, 60, 61 | iv | Labour employed by, statistics. | 370 | R C |
| Routes from, to L. of the Woods | | | Gold Dredging Co. | | |
| and Manitou lake | 88-90 | vi | Capital and date of charter | 26 A | xv |
| Tale on, for Indian pipes | 46, 85 | iv | Malleable Iron Co. | 119 | ii |
| pt., L. OF THE WOODS, R. R. D. | | | Steel Casting Co. | | |
| Gold prospecting at | 31 | iii | Labour employed by, statistics. | 370 | R C |
| Pirsson, Prof. L. V. | | | Steel output of, 1893 | 120 | ii |
| Acknowledgments to. | 189 | ix | Steel Works. | | |
| 208, 209 | | xi | Labour employed by, statistics. | 370 | R C |
| Analysis by, of heronite. | 189 | ix | Supply Co. | 118 | ii |
| Presence of nepheline rocks sug- | | | tp., FRONTENAC CO. | | |
| gested by, on Pic island | 208 | xi | Granite quarrying in. See Wil- | | |
| Pischu rapid, NETOGAMI RIVER. | | | letshoime. | | |
| Diabase-dolerite from, petro- | | | Piuze, J. | 67 | xii |
| graphy | 141 A | xiii | Pixley, O. C. | 105 | vii |
| Minor ref. to. | 138 A | xiii | | 101 | viii |
| Pishkanogama lake AND river, | | | Plagioclase. | | |
| ATG. | | | Description of. | 539 | R C |
| Description of, by Parks. | 134, 135 | ix | <i>Planorbis bicinctus</i> . | | |
| Forest fires on | 142 | ix | In Saugeen clay. | 26 B | xv |
| Pine on | 141 | ix | " <i>campanulatus</i> . | | |
| Route to, from Ground-hog river, | | | In Saugeen clay | 26 B | xv |
| description | 133 | ix | " <i>parvus</i> . | | |
| Soil and timber near | 114 | iv | In Saugeen clay. | 26 B | xv |
| Waterpower on | 142 | ix | " <i>trivialis</i> . | | |
| Pitchblende. See Uraninite. | | | Emerald lake. | 87 B | xiii |
| Pitcher plant. | | | | | |
| Abitibi dist. | 253 A | xiv | | | |

| | Page. | Vol | | Page. | Vol |
|--|---------------|------|--|----------|------|
| Plant, John | | | <i>Platygostoma lineata</i> . | | |
| Estimate by, of peat in Great Britain..... | 189 | i | Kwataboahagan river, notes.186, 187 A | xiii | |
| Plant—? | | | photo ... | 192 A | xiii |
| Kaolin from Hamilton tested by..... | 86 | R C | " <i>ventriosum</i> . | | |
| Plantagenet, PLANTAGENET TP., | | | Cayuga (N.) tp..... | 146 | xii |
| PRESCOTT CO. | | | Walpole tp..... | 143, 144 | xii |
| Saugen clay worked at..... | 34 B | xv | Plaunt, Xavier | 439 | R C |
| tp., PRESCOTT CO. | | | Playfair, J. J. See Playfair iron mine. | | |
| Limestone in..... | 108 B | xiii | Playfair (DALHOUSIE) iron mine, | | |
| Trenton..... | 98 B | xiii | BATHURST TP., LANARK CO. | | |
| <i>Plantago major</i> . | | | Evidence <i>re</i> , before R. C..... | 138-140 | R C |
| Abitibi Lake dist..... | 242 A | xiv | Ore of, hematite..... | 46 | ii |
| Mattagami valley..... | 150 A | xv | analysis and notes..... | 55, 56 | ii |
| Plantain, broad-leaved | | | notes by Rattle..... | 52, 138 | R C |
| Night-hawk lake..... | 123 A | xiii | Pyrites in..... | 128 A | xvi |
| Plants. See Flora. | | | Report on, by Cowan..... | 39 | vi |
| Plaster of Paris. See Gypsum. | | | Section of..... | 139 | R C |
| Plastico. | | | Pleistocene deposits. | | |
| Uses of..... | 114 | i | Iron ores of, notes by Coleman..... | | |
| Plate glass See Glass. | | | 142, 143 | xi | |
| Platinum. | | | Notes on, by Bell..... | 48-52 | R C |
| British Columbia..... | 6, 8 A | xiv | Peninsula, L. Superior..... | 111 | vi |
| origin..... | 154 C | xiv | Sudbury dist., notes by Coleman..... | 241 | xii |
| Catalytic property of..... | 63 | x | 101-106 C | xiv | |
| Hardness of..... | 202 | vi | Timagami dist..... | 165 | x |
| Lake of the Woods (reported)..... | 92 | i | Wanapitei Lake dist..... | 137 | vii |
| McConkey tp..... | 171 | ix | geology. | | |
| New sources of, report by Emmons..... | 179, 180 | ii | Copper and iron regions of Ont..... | | |
| New South Wales..... | 6 A | xiv | 175-178 | ix | |
| Norway nickel deposits..... | 162 C | xiv | Lake Superior, north shore..... | 150, 151 | viii |
| Notes on..... | 206, 207 | vi | Michipicoten div..... | 184, 185 | xi |
| and on distribution..... | 142, 143 | vii | 192-199 A | xv | |
| Production, 1887 (Canadian)..... | 24 | R C | Nipissing and Algoma dists., | | |
| 1888..... | 525 | R C | notes by Coleman..... | 210-212 | x |
| 1901..... | 1-3, 5 | 6 A | Port Arthur, west of..... | 146, 147 | xi |
| 1905..... | 1-3 A | xv | See also Glaciation. | | |
| 1906..... | 3, 5, 6 A | xvi | system (POST PLIOCENE). | | |
| Prospecting for, hints on..... | 457 | R C | Definition of..... | 540 | R C |
| Round lake, E. of Moss tp..... | 118 | y | <i>Platyceras</i> . | | |
| Russia..... | 190 | ii | Don river and Toronto..... | 230 A | xiii |
| Specific gravity of..... | 154 C | xiv | <i>Pleuronotus de ceui</i> . | | |
| Sudbury dist..... | 202 | vi | Anderdon tp..... | 127 | xi |
| 282 | xii | | <i>Pleurotomaria</i> . | | |
| 5, 6 A | xiv | | Anderdon tp..... | 125, 127 | xi |
| percentage..... | 151, 153 C | xiv | " <i>adjutor</i> . | | |
| production..... | 155 C | xiv | Kwataboahagan river, notes.186, 187 A | xiii | |
| Vermilion mine..... | 105, 113, 181 | R C | photo.... | 192 A | xiii |
| 92 | i | | " <i>delicatula</i> . | | |
| 190 | ii | | Kwataboahagan river, notes.186, 187 A | xiii | |
| 525 | R C | | photo.... | 192 A | xiii |
| United States, production, 1888..... | | | " <i>ityis</i> . | | |
| Platinum, arsenide See Sperrylite. | | | Hamilton formation..... | 187 A | xiii |
| Platt, John | | | Plevna, CLARENDON TP., FRONTENAC CO. | | |
| Salt making by, at Goderich..... | 190 | R C | Iron pyrites near..... | 203 | xi |
| <i>Platyceras</i> . | | | 164 A | xvi | |
| Anderdon tp..... | 125 | xi | Mispickel near..... | 203 | xi |
| " <i>bisulcatum</i> . | | | Pliny. | | |
| Walpole tp..... | 143 | xii | Views of, on asbestos..... | 93 | iii |
| " <i>ventriosum</i> . | | | Pliocene system. | | |
| St. Marys..... | 152 | xii | Definition of..... | 540 | R C |
| Walpole tp..... | 143 | xii | Plover. | | |
| <i>Platygostoma</i> . | | | Abitibi dist..... | 253 A | xiv |
| Anderdon tp..... | 127 | xi | Plum. | | |
| St. Marys..... | 152 | xii | L. of the Woods (wild)..... | 51 | v |
| Woodstock..... | 148 | xii | 104 | vi | |
| " <i>linearis</i> . | | | creek, PIERCE CO., WIS. | | |
| Port Colborne (near)..... | 36 | xi | Diamonds in. | | |

| | Page. | Vol. | | Page. | Vol. |
|--|---------------|----------|--|----------|------|
| Plumbago. See Graphite. | | | Point Pelee Oil and Gas Exploration Co. | | |
| Plummer, W. H. | | | Capital and date of charter..... | 24 | xiii |
| Evidence by, before R. C. re:— | | | Poirier, Pascal | | |
| Bruce and Wellington mines..... | 100, 101, 404 | R C | Boring by, for oil, Manitoulin island..... | 72 | xv |
| English capital in Canadian mines..... | 231 | R C | Poison. | | |
| mining on private lands..... | 309 | R C | Arsenic as a, notes on..... | 120, 121 | xi |
| technical education..... | 424 | R C | Pokay lake, WHITE RIVER, L. SUPERIOR. | | |
| Owner of claim, Bruce Mines dist..... | 38 | viii | Beach near..... | 176 | ix |
| tp., A.T.G. | | | altitude..... | 193 | xv |
| Copper in..... | 23 | xi | Description of..... | 140 | viii |
| mining, 1899..... | 95 | ix | Morainic drift near..... | 288 | xiv |
| 1900..... | 118 | x | Pokorney, L. G. | 143 | x |
| Farin lands in. See Rydalsbank. | | | | 75 | xi |
| Plum=pudding island, ABITIBI RIVER. | | | | 67 | xii |
| Carbonaceous shales near..... | 159 | xiii | Pokrovsk, VLADIMIR PROV., RUSSIA. | | |
| Plutonic rocks. | | | Peat in..... | 217 | ii |
| Mode of formation..... | 540 | R C | Pol, B.; F. AND J. | 117 | ix |
| | 230 | vi | | 143 | x |
| Plutus Gold Mg. Co. | | | | 75 | xi |
| Capital and date of charter..... | 12 | vii | Pola, AUSTRIA. | | |
| Plympton tp., LAMBTON CO. | | | Armour plate trials at..... | 197 | iv |
| Boring in, for water. See Forest. | | | Polaris claim, MOUNTAIN LAKE, N. OF JACKFISH, TH. B. D. | | |
| Oil in..... | 25 | v | Notes on, 1900..... | 86 | x |
| | 17 | x | Pollock, Jackson | | |
| Poa annua. | | | Notes by, on tests of Dickson peat process..... | 201 | i |
| Abitibi Lake dist..... | 242 | xiv | W. G. | 275 | xi |
| " <i>compressa</i> | | | quarries, HAY PT., ST. JOSEPH ISLAND, L. HURON. | | |
| Abitibi Lake dist..... | 242 | xiv | Limestone from, analysis..... | 79 | xiii |
| " <i>pratensis</i> | | | Polvi, Anhusti. | 34, 35 | xvi |
| Abitibi Lake dist..... | 242 | xiv | Polybasite. | | |
| " <i>serotina</i> | | | Joachimsthal, Bohemia..... | 61 | xiv |
| Abitibi Lake dist..... | 241 | xiv | Polycrase. | | |
| Pogonia aphroglossoides. | | | Calvin tp..... | 207 | ix |
| Abitibi Lake dist..... | 241 | xiv | Polydymite. | | |
| Point Abino, L. ERIE. See Abino pt. Ann, Bay of QUINTE. | | | Composition of..... | 170 | ii |
| Cement works at..... | 133 | xiv | Sudbury dist..... | 194 | ii |
| See also Belleville Portland Cement Co. | | | | 281 | xii |
| Limestone at, analyses: 27, 28, 61, 62 | | xiii | analyses..... | 159 | xiv |
| quarries..... | 289 | viii | Denison and Drury tps..... | 207 | ix |
| | 59 | xiii | Vermilion mine..... | 168 | ii |
| au Chenes, L. ST. CLAIR, U.S. | 108 | v | Pol. gale paucifolia. | | |
| aux Iroquois, L. SUPERIOR, U.S. | 191 | R C | Mattagami valley..... | 150 | xv |
| Pointe aux Mines, L. SUPERIOR. | | | Polygonatum biflorum. | | |
| Cave at, photo..... | 152, 153 | viii | Abitibi Lake dist..... | 241 | xiv |
| Cliff near, photo..... | 168, 169 | viii | Mattagami valley..... | 150 | xv |
| Copper at, bornite..... | 195 | ix | Polygonum amphibium. | | |
| chalcopyrite..... | 212 | vi | Abitibi Lake dist..... | 241 | xiv |
| mining, early..... | 93 | R C | Mattagami valley..... | 151 | xv |
| | 208 | v | " <i>articulare</i> | | |
| Early surveying of, for mining locations..... | 126 | vi | Abitibi Lake dist..... | 242 | xiv |
| Geology of, notes by Coleman..... | 129, 130 | viii | " <i>cilioides</i> | | |
| Jasper ore at..... | 190, 201 | x | Mattagami valley..... | 150 | xv |
| Rocks at and near..... | 132, 133 | vi | " <i>dumetorum</i> | | |
| amygdaloidal..... | 168 | viii | Abitibi Lake dist..... | 242 | xiv |
| Keweenawan..... | 39 | R C | Polyphemus moth. | | |
| trap..... | 15 | v | Abitibi dist..... | 129 | xiii |
| Zinc-blende at..... | 209 | ix | Polypodium vulgare. | | |
| Point aux Pins, L. SUPERIOR. | | | Abitibi Lake dist..... | 242 | xiv |
| Furnace erected at..... | 209 | v | Mattagami valley..... | 151 | xv |
| Shipyard at, early..... | 197 | v | Polypora perangulata. | | |
| Levis, LEVIS CO., QRE. | | | Kwataboahagan river..... | 185 | xiii |
| Anthraxolite at..... | 6 | Bull. ii | " <i>chumardi</i> | | |
| Pelee, L. ERIE. See Pelee pt. | | | Kwataboahagan river..... | 185 | xiii |

| | Page. | Vol. |
|---|--------------------|------|
| <i>Polypora tuberculata</i> . | | |
| Stony pt., L. Huron..... | 155 | xii |
| <i>Polystomella crispa</i> . | | |
| Ottawa..... | 225 | x |
| Polytechnic School of Delft, Hol- | | |
| LAND | 500 | R C |
| <i>Polyzoa</i> . | | |
| Kwataboahagan river..... | 185 A | xiii |
| Pomerania, PRUSSIA . | | |
| Moss litter made in..... | 212, 213 | ii |
| Pond Lily lake, FRONTENAC CO. | | |
| Limestone on..... | 44 B | xiii |
| Pond-portage rapid, MISSISSAUGI | | |
| RIVER, ALG. | | |
| Photo of..... | 144, 145 A | xiii |
| Pononish, A. | | |
| | 143 | x |
| | 75 | xi |
| | 67 | xii |
| | 49 A | xiii |
| Ponsford and Freek. | | |
| Brick-yard of, St. Thomas..... | 62 B | xv |
| producing, 1902..... | 29 | xii |
| Pontiac and Nipissing Exploration | | |
| Co. | | |
| Capital and date of charter..... | 30 A | xvi |
| co., QUE. | | |
| Apatite in..... | 436 | R C |
| Geology of portion of, N. of L. | | |
| Timiskaming..... | 174 | ix |
| Marble in..... | 102 B | xiii |
| Lookout, MACKINAC ISLAND, L. | | |
| HURON | 109 | v |
| Mining Co. | | |
| Capital and date of charter..... | 9 | viii |
| Pontypool, MANVERS TP., DURHAM | | |
| co. | | |
| Stratified deposits at, altitude.... | 223 | x |
| <i>Pooecetes gramineus</i> . See Sparrow, | | |
| vesper | | |
| Poooh-bah lake, R. R. D. | | |
| Malignite on, ref. to..... | 213 | xi |
| Nepheline near..... | 205 | ix |
| Rocks on..... | 102 | v |
| Poole island, L. HURON . | | |
| Trap rock quarrying on..... | 13, 15 | v |
| Pope, F. J. | | |
| Analysis by, of titaniferous ores, | | |
| near Seeley Bay..... | 230 | vii |
| | 229 | viii |
| Vanadium reported by, in titanite | | |
| ores of Ont..... | 223 | vii |
| Work by, 1897..... | 260 | vii |
| on magnetic concen- | | |
| tration of iron ores.. | 337 | xii |
| Poplar. | | |
| Abitibi dist..... | 108, 109 A | xiii |
| | 196-205, 217-235 A | xiv |
| | 125, 126 A | xv |
| Ahitibi river and tribs. 178-188, 193 | | viii |
| Black river..... | 185, 186 | xii |
| Knox tp., photos..... | 216, 217 A | xiv |
| Night-hawk lake..... | 176 | viii |
| Blanche river..... | 215 | xi |
| | 174-183 | xii |
| Distribution of..... | 121 | iv |
| Gypsum mt., Alg.-Nip. boundary. 158 A | | xiii |
| Hudson Bay slope..... | 176 | vi |
| L. Huron slope..... | 170 | vi |
| Lac des Mille Lacs..... | 136 | v |

Poplar. — Con.

| | Page. | Vol. |
|---------------------------------------|--------------------------|------|
| Lac Seul..... | 62 | v |
| Matawin river..... | 132 | v |
| Mattagami valley..... | 129, 130 | ix |
| | 105 A | xiii |
| | 188-195, 221 A | xiv |
| | 118-124, 128, 144, 145 A | xv |
| diameter..... | 127, 139-143, 152 A | xv |
| photo..... | 137 A | xv |
| Michipicoten div..... | 13 Bull. | iii |
| | 206 | vii |
| | 201 | viii |
| Mainainse pen..... | 72 | iii |
| Missinaibi valley..... | 140 | ix |
| Mississagi River dist..... | 172 | xii |
| Moss tp..... | 79 | v |
| Nipigon Lake region..... | 212 | x |
| | 138 A | xvi |
| Pishkanogama valley..... | 135 | ix |
| Porcupine lake..... | 176 | viii |
| Port Arthur and vicinity..... | 114 | ii |
| Rainy River dist..... | 65 | R C |
| | 181 | vii |
| Kenora..... | 170 | v |
| Rainy Lake reg..... | 96 | iv |
| Rainy river..... | 117 | iv |
| | 207, 208 | v |
| Seine River reg..... | 149-151, 155 | v |
| Windigoostigwan lake..... | 137 | v |
| Wabigoon lake, near..... | 171 | vii |
| Savant lake..... | 88 | xi |
| Spanish river..... | 125 | ix |
| Timagami Lake dist..... | 56, 58 | R C |
| aspen See Aspen, poplar | | |
| balsam | | |
| Abitibi dist..... | 216, 219, 242 A | xiv |
| Distribution..... | 121 | iv |
| Lac Seul..... | 62 | v |
| Mattagami valley..... | 188 A | xiv |
| Michipicoten div..... | 295 A | xiv |
| Nipigon Lake dist..... | 112 | iv |
| Porcupine river..... | 221 A | xiv |
| rough-barked See Balm of | | |
| Gilead. | | |
| white | | |
| Blanche River dist..... | 180 | xii |
| Whitefish valley, R. R. d..... | 239 | R C |
| island, MOOSE RIVER, ALG. | | |
| lodge, NIPIGON LAKE, TH. B. D. | | |
| Country in vicinity of, notes.... | 212 | x |
| | 107 A | xvi |
| Glacial striae on..... | 135 A | xvi |
| H. B. C. post at, abandoned.... | 106 A | xvi |
| Photo of..... | 113 A | xvi |
| Rocks at and near..... | 214 | x |
| conglomerate..... | 110 A | xvi |
| greenstone..... | 111 A | xvi |
| iron formation..... | 119, 132 A | xvi |
| photo..... | 113 A | xvi |
| petrography..... | 129 A | xvi |
| Route to, via Nipigon river..... | 107 A | xvi |
| Surveyor's post near, photo..... | 111 A | xvi |
| pt., LAC DES MILLE LACS, | | |
| TH. B. D. | | |
| Indian reserve at..... | 74, 114 | v |
| Moose at..... | 135 | v |
| rapid, MATTAGAMI RIVER, ALG. | | |
| Description of river near..... | 123 A | xv |
| Laurentian at..... | 131 A | xv |

| | Page. | Vol. | | Page. | Vol. |
|---|---------------|--------|--|----------|--------|
| Poplar Rapids river, MATTAGAMI RIVER, ALG. | | | Porpezite. | | |
| Agricultural land in valley of..... | 121 | A XV | Brazil, with palladium..... | 7 | A xiv |
| analysis of soil..... | 152-154 | A XV | Porphyrite. | | |
| Description of, by Kerr..... | 123, 124 | A XV | Cross inlet, L. of the Woods, petrography..... | 146 | vii |
| river, L. SUPERIOR. | | | Dryberry river, near..... | 103 | vi |
| Gold on..... | 115 | R C | Pigeon lake, petrography..... | 209 | x |
| river, MISSISSAUGA RIVER, ALG. | | | Wabigoon Lake dist..... | 183 | vii |
| Notes on, by Parks..... | 194 | viii | Porphyritic granite. | | |
| Population. | | | Sultana island, L. of the Woods..... | 116 | vi |
| Indson Bay slope..... | 131 | iv | analysis and petrography..... | 121, 122 | vi |
| Kenora and Keewatin..... | 171 | v | Porphyry. | | |
| L. Superior, N. shore..... | 147 | viii | Abitibi dist., petrography..... | 119, 120 | A xiii |
| Movements of, now affected..... | 223 | R C | As a building stone..... | 134 | iii |
| Ontario, 1901..... | 192 | xii | Description of..... | 540 | R C |
| Sand Point City, Rainy lake..... | 161 | v | Gros Cap, L. Superior..... | 127 | viii |
| <i>Populus balsamifera</i> , See Poplar, balsam | | | Keweenaw Point dist., U.S..... | 36 | R C |
| " <i>balsamifera</i> (fossil)..... | | | Calumet mine..... | 38 | R C |
| Ottawa (near)..... | 225 | x | L. of the Woods..... | 101 | vi |
| " <i>grandidentata</i> (fossil)..... | | | Larder Lake dist..... | 210 | A xvi |
| Ottawa (near)..... | 225 | x | Michipicoten island..... | 171 | viii |
| " <i>trunculoides</i> , See Aspen, poplar | | | Rainy River dist. :— | | |
| Porcelain. | | | notes by Coleman..... | 118 | vi |
| Aluminium in..... | 173 | i | Rainy Lake dist., petrography..... | 87, 88 | iv |
| Porcupine. | | | pt., L. SUPERIOR. | | |
| Wild Potato lake, notes and sketch..... | 154 | v | Rocks at..... | 37 | R C |
| lake, PORCUPINE RIVER, NIGHT-HAWK LAKE, ALG. | | | Silver prospecting at..... | 197 | R C |
| Glacial striae on..... | 115 | A xiii | Porpoise. | | |
| Gold prospecting on, advisable..... | 141 | ix | Hudson bay and strait..... | 133 | iv |
| Minor ref. to..... | 129 | ix | Port Albert, ASHFIELD TP., HURON CO. | | |
| Notes on, by Kay..... | 106 | A xiii | Rocks near..... | 66 | B xiii |
| Parks..... | 176 | viii | Arthur, Tn. B. D. | | |
| Soil from and vicinity, character..... | 130, 132 | A xiii | See also Port Arthur dist. | | |
| Trees on..... | 115, 122, 221 | A xiii | Animikie at, composition..... | 101 | C xiv |
| Volcanic tufa on..... | 120 | A xiii | Blast furnace at..... | 47 | A XV |
| Water in, low in Sept..... | 124 | A XV | description..... | 60, 61 | A XV |
| (TWIN CITIES) mine, GILLIES TP., Tn. B. D. | | | erected..... | 60 | A xvi |
| Controlled by Consolidated Mg. Co..... | 19 | xi | proposed..... | 13 | A xiv |
| Evidence re, before R. C. 63, 199, 203..... | 96 | xii | Coal dock at, photo..... | 61 | A XV |
| Minor ref. to..... | 5 | A XV | Mining class at..... | 6, 217 | v |
| Witherite at..... | 212 | ix | | 198 | vi |
| Work at, 1890..... | 226, 227 | i | | 260 | vii |
| 1899..... | 84, 85 | ix | Recorder's Office at..... | 36 | A xvi |
| 1901..... | 258 | xi | school at, suggested..... | 426 | R C |
| mts., MICHIGAN, U. S. | | | Silver shipments from, 1888..... | 72 | R C |
| Copper of..... | 83 | iii | Staup mills in, untaxed..... | 427 | R C |
| Syncline of..... | 76 | iii | Striae at, direction..... | 178 | ix |
| portages, NEAR FORT MATTAGAMI, ALG. | | | Water-power for, from Current river..... | 13 | A XV |
| Banksian pine plains at, photo..... | 219 | A xiv | Arthur dist., Tn. B. D. | | |
| Rocks near..... | 132 | A XV | Agricultural land in..... | 103 | iv |
| river, NIGHT-HAWK LAKE, ALG. AND NIP. | | | | 207 | v |
| Description of..... | 106, 107 | A xiii | Amethysts from, exhibited at Chicago..... | 187 | ii |
| Lake shores near, description..... | 175 | viii | Barite from, exhibited at Chicago..... | 190 | ii |
| Notes on..... | 176 | viii | Forest fires in..... | 205 | v |
| Rocks on, dolerite..... | 116, 117 | A xiii | Gold in..... | 39 | iv |
| Soil on..... | 122, 134 | A xiii | Iron ore in..... | 156 | A XV |
| analysis..... | 247 | A xiv | hematite, quality..... | 191 | ii |
| Pork rapid, MONTREAL RIVER..... | 55 | A xvi | marcasite..... | 187 | ii |
| | | | paper by Miller..... | 309-314 | xii |
| | | | ranges, notes by Coleman..... | 128-134 | xi |
| | | | See also Animikie iron range. | | |
| | | | Lead in..... | 145 | R C |

| | Page. | Vol. |
|---|----------|--------|
| Port Arthur dist.—<i>Con.</i> | | |
| Natural gas in..... | 153 | R C |
| Pleistocene deposits in..... | 146 | xi |
| Railway in, need of..... | 207 | R C |
| Rocks in..... | 273 | A xiv |
| Annikie..... | 39 | iv |
| diabase..... | 27 | B xiv |
| olivine..... | 127 | C xiv |
| notes by Coleman..... | 149 | ix |
| trap..... | 32 | R C |
| Saponite in..... | 208 | ix |
| Silver ores of:— | | |
| argentite, analysis..... | 194 | ix |
| compared to Cobalt ores..... | 101, 102 | A xiii |
| evidence before R. C..... | 62, 63 | R C |
| ..... | 191-202 | R C |
| mining, 1891..... | 226-229 | i |
| 1892..... | 239-241 | ii |
| 1897..... | 83, 84 | vii |
| 1898..... | 22, 50 | viii |
| 1899..... | 85 | ix |
| 1901..... | 257-259 | xi |
| 1906..... | 8 | A xvi |
| notes by Blue..... | 176, 177 | i |
| Ingall..... | 51-58 | B xiv |
| McKellar..... | 237-239 | iv |
| price falling has had | | |
| effect..... | 5 | A xv |
| Sulphur in..... | 22 | A xvi |
| Tellurium in..... | 38 | iv |
| Zinc in..... | 38 | iv |
| ..... | 209 | ix |
| notes by Merritt..... | 204 | R C |
| Arthur Duluth & Western Ry. | | |
| Marl deposits along..... | 111 | B xiii |
| Arthur Iron Co. | | |
| Capital and date of charter..... | 9 | x |
| Arthur Iron Mines, Ltd. | | |
| Exhibits of, at Chicago..... | 25 | A xv |
| Arthur Mining div. | | |
| Creation of..... | 36 | A xvi |
| Description of..... | 41 | A xvi |
| Arthur Sand, Lime, Brick Co. | | |
| Capital and date of charter..... | 30 | A xvi |
| Clinton, OTTAWA CO., OHIO. | 116 | i |
| Colborne, HUMBERSTONE TP., WELLAND CO. | | |
| Artesian well near, sulphurous..... | 59 | i |
| Calcite from, analysis..... | 14 | B xiii |
| Cement rock at, notes and analysis..... | 34, 35 | xi |
| Corniferous formation in..... | 119 | B xiii |
| thickness..... | 156 | i |
| Fossils from, corals..... | 14 | B xiii |
| Glass factory at, proposed..... | 128 | i |
| Limekilns near..... | 37 | v |
| ..... | 119 | B xiii |
| Limestone near, boring in..... | 27 | A xv |
| quarries..... | 116 | B xiii |
| Lower Helderberg near..... | 153 | xii |
| ..... | 53 | B xiii |
| Natural gas in..... | 151 | R C |
| ..... | 44 | xi |
| ..... | 91 | A xiv |
| boring for..... | 152 | R C |
| ..... | 161, 162 | i |
| paper by Blue..... | 128, 129 | i |

Port Colborne. —*Con.*

| | | |
|--|------------|--------|
| Nickel extraction tests at, proposed..... | 134 | ii |
| Colborne Gas Light and Fuel Co. | | |
| Notes on..... | 129 | i |
| Colborne Mutual Natural Gas Co. <i>See</i> Mutual Natural Gas Co. | | |
| Colborne = Welland Natural Gas and Oil Co. | | |
| Capital and date of charter..... | 26 | A xv |
| Coldwell, L. SUPERIOR. | | |
| Rocks at and near, petrography..... | 146-149 | vii |
| syenites, paper by Coleman..... | 208-213 | xi |
| Credit, TORONTO TP., PEEL CO. | | |
| Brick works at, notes and photo..... | 89, 90 | B xv |
| Hudson River formation at..... | 43 | R C |
| Medina formation near..... | 43 | R C |
| analysis..... | 8 | B xv |
| Credit Brick Co. | | |
| Analysis of shale used by..... | 8 | B xv |
| Plant of, notes and photos..... | 53, 89, 90 | B xv |
| Dover, WOODHOUSE TP., NORFOLK CO. | | |
| Bituminous shales at..... | 119 | B xiii |
| Erie clay at..... | 13 | B xv |
| Niagara formation near..... | 125 | B xiii |
| Dover Natural Gas and Oil Co. | | |
| Capital and date of charter..... | 9 | xii |
| Elgin, SAUGEEN TP., BRUCE CO. | | |
| Boring at, for salt..... | 55 | R C |
| Elmsley, N. ELMSLEY TP., LANARK CO. | | |
| Graphite near..... | 23, 106 | A xv |
| plant..... | 12 | A xiii |
| <i>See also</i> MacCue. | | |
| Franks, BOSANQUET TP., LAMINGTON CO. | | |
| Salt well at..... | 55, 190 | R C |
| depth..... | 186 | R C |
| Granby, CLARKE TP., DURHAM CO. | | |
| Iroquois beach from, to Trenton..... | 239 | A xiii |
| Henry, N. Y. | | |
| Iron ores at, method of concentrating..... | 349-351 | R C |
| ..... | 326, 330 | xii |
| Hope, HOPE TP., DURHAM CO. | | |
| Beach near..... | 230, 236 | A xiii |
| altitude..... | 233, 234 | A xiii |
| <i>See also</i> Silver lake. | | |
| Brick-yard at, notes..... | 62 | B xv |
| Natural gas at..... | 45 | xi |
| Peat prepared near..... | 197 | ii |
| Pottery works at..... | 29 | xii |
| ..... | 118 | B xv |
| Trenton limestone near..... | 89 | B xiii |
| Hope Oil and Gas Fund. | | |
| Boring by, for gas..... | 45 | xi |
| Lambton, SOMERS TP., LAMINGTON CO. | | |
| Corniferous formation at, thickness..... | 47 | R C |

| | Page. | Vol. | | Page. | Vol. |
|---|----------|--------|---|----------|--------|
| Port Leyden , LEWIS CO., N. Y. | | | Portland tp. , FRONTENAC CO. | | |
| Charcoal furnace at..... | 481 | R C | Feldspar in, mining..... | 102 A | xv |
| Macquarie , N. S. W. | | | | 86 A | xvi |
| Cobalt ore near..... | 70 | B xiv | prospecting..... | 81 A | xiv |
| Payne Coal & Iron Co. | 146 | iii | <i>See also</i> Kingston Mfg. | | |
| Robinson , THOROLD TP., WEL- | | | and Dev. Co. | | |
| LAND CO. | | | Pennsylvania | | |
| Clay near, character..... | 117 | B xiii | Feldspar Co. | | |
| Niagara formation at..... | 125 | B xiii | Iron ore in, exhibited at Chicago. | | |
| Rowan , WALSHINGHAM TP., | | | | 79-82 | ii |
| NORFOLK CO. | | | hematite..... | 199 | iii |
| Corniferous formation at..... | 46 | R C | Limestone in, fossiliferous..... | 44 B | xiii |
| | 25 | B xiii | Magnesite in..... | 202 | ix |
| Gas well at, record of..... | 108 | A xiv | Oil in, prospecting for..... | 283 | v |
| Rowan Natural Gas Co. | | | river, L. HURON. | | |
| Capital and date of charter..... | 26 | A xv | Trap rock quarrying near mouth | | |
| Stanley , YARMOUTH TP., ELGIN | | | of..... | 13 | v |
| CO. | | | tp. , LABELLE CO., QUE. | | |
| Bore-hole record at..... | 41 | B xiii | Apatite in, mining..... | 436, 441 | R C |
| Erie clay at..... | 13 | B xv | mode of occurrence... 178 | | R C |
| Talbot , DUNWICH TP., ELGIN CO. | | | "sugar"..... 442 | | R C |
| Erie clay at..... | 13 | B xv | <i>See also</i> Fleming Phos- | | |
| Portage and Chemung formation | | | phate Co. | | |
| at..... | 47 | R C | <i>Portlandia (Leda) arctica.</i> | | |
| Union , PICKERING TP., ONTARIO | | | Ottawa..... | 224 | x |
| CO. | | | Portsmouth , ENGLAND. | | |
| Nepheline-syenite near..... | 210 | xi | Armour plate tests at..... | 141, 142 | ii |
| Portage and Chemung formation. | | | Portugal. | | |
| Description of..... | 99 | A xiv | Arsenical ores in..... | 102 | xi |
| Ohio..... | 141 | i | Mining laws of..... | 298 | R C |
| Oil-fields, thickness of..... | 96 | A xiv | Pyrites deposits of..... | 172, 192 | A xvi |
| bay , BAY LAKE, MONTREAL | | | Posen , POSEN PROV., PRUSSIA. | | |
| RIVER. | | | Moss litter made in..... | 212 | ii |
| Smaltite on..... | 11 | A xv | Posepny —? | | |
| lake , S. OF L. SUPERIOR. | | | Views of re formation of sulph- | | |
| Copper-bearing beds of..... | 84 | iii | hides..... | 18 C | xiv |
| du Fort , PONTIAC CO., QUE. | | | Post lake , VERMILION RIVER, ALG. | | |
| Limestone at..... | 104 | B xiii | Gold on, alluvial..... | 258 | vii |
| du Rat . <i>See</i> Kenora. | | | Minor ref. to..... | 155, 156 | x |
| falls , MICHIGICOTEN DIV., ALG. | | | Tertiary deposits. <i>See</i> Pleis- | | |
| Description of river near..... | 286 | A xiv | tocene deposits. | | |
| Portages. | | | <i>Potamogeton pectinatus.</i> | | |
| Clearing of, suggestions by Blue. | 143 | v | Ottawa, near..... | 225 | x |
| Porter , Alfred de Bock | | | " <i>perfoliatus.</i> | | |
| Evidence by, re royalties in Gt. | | | Ottawa, near..... | 225 | x |
| Britain..... | 15 | i | " <i>puellus.</i> | | |
| H. K. & Co. | 119 | ii | Ottawa, near..... | 225 | x |
| inlet , RED-GUT BAY, RAINY | | | " <i>rudians.</i> | | |
| LAKE. | | | Ottawa, near..... | 225 | x |
| Graphite near..... | 86 | viii | Potania mts. , NOVGOROD DIV., | | |
| quarry , GORE BAY, MANITOULIN | | | RUSSIA..... | 213 | vii |
| ISLAND. | | | Potassium. | | |
| Limestone from, analysis..... | 75, 76 | B xiii | Proportion of, in earth's crust .. | 447 | R C |
| Portland , CUMBERLAND CO., ME. | | | alum. <i>See</i> Kalinite. | | |
| Granite buildings of, behaviour | | | dichromate. | | |
| in fire..... | 136 | iii | Line in manufacture of..... | 13 | A xiii |
| Portland cement. | | | Potato. | | |
| Definition of..... | 118 | R C | Mentioned as growing at:— | | |
| Industry of and occurrences. <i>See</i> | | | Abitibi dist., Abitibi lake | 50 | A xvi |
| Cement. | | | river, | | |
| Mortar from, compared with that | | | New | | |
| from natural cement..... | 163 | A xii | Post .. | 186 | viii |
| Notes on, by Cummings..... | 106, 107 | i | Black river..... | 253 | A xiv |
| Miller..... | 16, 17 | B xiii | Frederick House | | |
| Quality of, in Ontario..... | 17 | iv | lake..... | 239, 240 | A xiv |
| Specification for concrete made | | | Night-hawk lake | 177 | vii |
| from..... | 180, 181 | A xiv | | 123 | A xii |
| island , ENGLAND. | | | Redstone river..... | 107 | A xiii |
| Oolitic limestone of..... | 118 | A xiv | | | |

| | Page. | Vol. | | Page. | Vol. |
|---|--------------|--------|---|------------|----------|
| Potato.—<i>Con.</i> | | | Pottery.—<i>Con.</i> | | |
| Mentioned as growing at.— <i>Con.</i> | | | Statistics of 1891 | 6 | i |
| Albany river..... | 107, 111-113 | iv | 1892..... | 7, 11 | ii |
| Fort Mattagami..... | 121 | A xiii | 1893..... | 7, 10 | iii |
| Garden River, near | 197 | viii | 1894..... | 11 | iv |
| Jocko river..... | 58 | R C | 1895..... | 11 | v |
| Kamiskotain | 119, 151 | A xv | 1896..... | 13 | vi |
| Michipicoten div..... | 296 | A xiv | 1897..... | 11 | vii |
| Goulais valley..... | 197 | viii | 1898..... | 13 | viii |
| Michipicoten | 206 | vii | 1899..... | 12 | x |
| Mississagi river | 164, | xii | 1900..... | 11, 12 | x |
| Moose Factory..... | 107 | iv | 1901..... | 13, 30 | xi |
| Sturgeon lake, R. R. d. and | | | 1902..... | 12, 13, 29 | xii |
| Th. B. d..... | 149 | xi | 1903..... | 3, 15, 16 | A xiii |
| Thunder bay, L. Superior .. | 114 | v | 1904..... | 1, 3, 16 | A xiv |
| Kapiskasing lake..... | 137 | ix | 1905..... | 1, 4 | A xv |
| L. of the Woods | 105 | vi | 1906..... | 4, 6 | A xvi |
| Lac Seul..... | 62 | v | | | |
| Lost lake..... | 60 | v | Pottstown, MONTGOMERY CO., PA. | | |
| bug. See Colorado beetle. | | | Iron industry of..... | 117 | ii |
| bug finish. | | | Iron Co..... | 117 | ii |
| For Colorado beetle | 251 | iv | Pottsville, SCHUYLKILL CO., PA. | | |
| Potawatamie river, OWEN SOUND. | | | Analysis of anthracite from | 5 | Bull. ii |
| Niagara formation on..... | 49 | B xiii | Smelter at, notes by Pusey..... | 388 | R C |
| <i>Potentilla anserina.</i> | | | conglomerate. | | |
| Mattagami valley | 151 | A xv | Natural gas found in | 151 | R C |
| Ottawa, near..... | 225 | x | Potvin, Frank..... | 43, 50 | x |
| " <i>fruticosa.</i> | | | Poulin, Joseph..... | 52, 57 | xi |
| Abitibi Lake dist..... | 241 | A xiv | Poupore, W. J..... | 86 | ix |
| Mattagami valley | 150 | A xv | Powassan, HINSMWORTH TP., E.S.D. | | |
| " <i>norvegica.</i> | | | Brick-yard in, notes..... | 88 | B xv |
| Mattagami valley | 150 | A xv | clay for, analysis..... | 27 | B xv |
| " <i>palustris.</i> | | | Powawason Indian Reserve, R.R.D. | 167 | v |
| Abitibi Lake dist..... | 241 | A xiv | Powell, Herbert Marcus | | |
| " <i>peninsularum.</i> | | | Gold discovered by, Madoc tp.... | 27 | R C |
| Abitibi Lake dist..... | 241 | A xiv | Iron prospecting by, Marmora tp. | 237 | i |
| " <i>tridentata.</i> | | | Notes by, on Richardson mine.... | 53 | iii |
| Abitibi Lake dist..... | 241 | A xiv | and Mitchell. | | |
| Mattagami valley | 151 | A xv | Helen mine worked by..... | 126, 137 | x |
| Pot=holes. See Kettle-holes. | | | 54, 71 | xi | |
| Portreau, William..... | 30 | vii | Work by, at Bruce Mines..... | 13, 14 | v |
| Potsdam, GERMANY. | | | Granite Co. | | |
| Bricks in, from sand and lime .. | vi | B xiii | Capital and date of charter..... | 9 | x |
| Potsdam, ST. LAWRENCE CO., N. Y. | | | Powers, Edward | 32, 35 | A xvi |
| Potsdam formation named after.. | 39 | R C | Henry J..... | 31, 33 | iii |
| formation. | | | Joseph A. | | |
| Bastard tp..... | 80 | R C | Copper mining by, Mississagi | | |
| "..... | 34 | ii | river..... | 25 | vii |
| Carleton place..... | 145 | R C | 37, 148 | viii | |
| Elmsley tps..... | 80 | R C | Peter..... | 194 | iii |
| Methuen tp..... | 209 | viii | 263 | v | |
| Notes on, by Bell..... | 39, 40 | R C | Pozzuolana | | |
| Position of, in Cambrian..... | 2 | R C | Definition of..... | 14 | B xiii |
| Sault Ste Marie..... | 204 | xv | In mortars of Italy..... | 13 | B xiii |
| Thickness of, in oil-fields..... | 96 | A xiv | Prague. | | |
| Potter, D. D. E..... | 68 | viii | Dye industry in..... | 46 | xi |
| William B. | | | Prairie Bee lake, NEAR WINDER- | | |
| Analysis by, of copper, Mannainse | | | MEKE LAKE, ALG. | | |
| pen..... | 130 | ii | Notes on country around..... | 201 | viii |
| Potter creek, L. ERIE. | | | hen. | | |
| Iron furnace on..... | 319 | R C | Abitibi dist..... | 243 | A xiv |
| Pottery. | | | L. of the Woods | 120 | vii |
| Industry of, 1906, declining..... | 19 | A xvi | Pratt, J. Y..... | 122 | vii |
| notes by Baker, 118-120 | 3, 13 | B xiii | Joseph Hyde | | |
| Molybdenum for colouring..... | 232 | vii | Notes by, on Emery wheels | 38 | xi |
| Shales for Thedford and vicinity. | 155, 156 | xii | W..... | 105 | viii |
| | 70 | B xiii | 67 | xii | |
| | | | 49 | A xiii | |

| | Page. | Vol. | | Page. | Vol. |
|--|-----------------|--------|--|------------|--------|
| Pre-Cambrian. | | | Preston, S. WATERLOO TP., WATER- LOO CO. | | |
| Nomenclature of, report by In- ternational Committee..... | 269-277 | A xiv | Artesian wells at..... | 61 | i |
| Prebencore, P. | 41 | A xiii | Guelph formation at..... | 115 | B xiii |
| Precious stones. | | | Gold Mining Co. | | |
| See also Diamonds, Sapphires, etc. | | | See also Olive gold mine. | | |
| Hardness and specific gravity of. | 203 | vi | Capital and date of charter..... | 7 | vi |
| Notes on, by Goodwin..... | 227, 228 | vi | | 12 | vii |
| United States, production, 1888.. | 525 | R C | Owning Olive gold mine..... | 32 | vii |
| Preece, W. H. | 115 | viii | Work by, near Mine Centre..... | 263 | vi |
| Prehnite. | | | Prestwick, Prof. Joseph | | |
| Apatite districts..... | 442 | R C | Views of, re origin of gypsum.... | 120 | R C |
| Associated with copper..... | 192 | ii | Prewer, Rev. George | 48, 54, 62 | v |
| L. Superior..... | 194 | ii | | 182 | vii |
| | 207 | ix | Price, David | | |
| islands..... | 37 | R C | Copper smelting by, for Quebec | | |
| shewn at Chicago..... | 184 | ii | Mg. Co..... | 171 | ii |
| Slate river, analysis..... | 207 | ix | F. G..... | 105 | vii |
| Premier Gold Mg. Co. | | | H. E. | | |
| Capital and date of charter..... | 12 | vii | Gold mining by, Manitou Lake | | |
| Licence to..... | 75 | xi | reg..... | 63 | ix |
| | 67 | xii | L. | | |
| | 36 | A xiv | Brick works of, Toronto | 109, 110 | B xv |
| <i>Preonanthus racemosus.</i> | | | shale for, analysis.... | 8 | B xv |
| Abitibi Lake dist..... | 241 | A xiv | James | 28 | ix |
| Mattagami valley..... | 151 | A xv | Price, John | | |
| Preneval, G. | 117 | ix | Brick works of, Toronto..... | 29 | xii |
| Preneveau, G. | 143 | x | | 108, 109 | B xv |
| | 75 | xi | John | | |
| | 67 | xii | Quarrying by, Credit Forks..... | 99 | i |
| | 48 | A xiii | W. G. & Co..... | 118 | ii |
| Prentice, Edward Alexander | | | Prideaux, T. G. | 81, 274 | viii |
| Part owner, Silver Islet mine.... | 141 | x | | 75 | ix |
| Purchaser of Montreal Mg. Co's estate..... | 140, 141 | vi | Priest quarry, GUELPH TP., WEL- LINGTON CO. | | |
| Prescott, W. | 296 | xi | Limestone of, analysis..... | 122 | B xiii |
| Prescott, AUGUSTA TP., GRENVILLE CO. | | | Primeau, Peter | 79 | A xiii |
| Brick-yard at..... | 65 | B xv | Prince, Hon. John | 255 | R C |
| analysis of clay used in | 15, 17 | B xv | Arthur landing. See Port Arthur. | | |
| Cambro-Silurian in..... | 47, 48 | B xiii | August of Saxony. | | |
| Erie clay west of..... | 9 | B xv | Connected with Cobalt mines of Schneeburg. | | |
| Marine deposits near..... | 220 | x | bay, THUNDER BAY, L. SUPER- IOR. | | |
| ice-land..... | 32 | B xv | Copper mining at | 98 | R C |
| co. | | | | 173 | ii |
| Axinite in..... | 193 | ii | Gold in ores of..... | 25 | R C |
| Limestone in, notes by Miller.... | 98 | B xiii | copper-silver mine, SPAR ISLAND, L. SUPERIOR. | | |
| Peat in..... | 197 | ii | Minerals in | 131 | vi |
| Emery Wheel Co. | | | | 56 | B xiv |
| Notes by, on Raglan tp., corn- dum | 240 | viii | apophyllite..... | 194 | ix |
| Present lake. See Larder lake. | | | azurite..... | 195 | ix |
| President Gold Mg. Co. | | | cobalt..... | 59, 60 | B xiv |
| Capital and date of charter..... | 9 | xii | bloom..... | 194 | ii |
| lake. See Larder lake. | | | | 198 | ix |
| Presquile river, WISCONSIN, U.S. | | | | 59 | B xiv |
| Rocks east of..... | 271 | A xiv | sphalerite | 209 | ix |
| Preston, W. A. | | | Edward co. | | |
| See also Preston Gold Mg. Co. | | | Beach in, notes by Coleman..... | 240, 241 | A xiii |
| Manager, Olive gold mine. | | | Fossils in..... | 27 | B xiii |
| | 32, 33, 71, 128 | vii | Limestone in, notes by Miller.... | 99 | B xiii |
| | 46, 80 | viii | Trenton..... | 41 | R C |
| | 72 | ix | | 44 | B xiii |
| | 80 | x | Edward Island. | | |
| | 134 | xi | Absence of minerals in..... | 43 | i |
| Mispickel reported by, R.R.d.... | 106 | xi | Peat in, notes by Harrington ... | 210 | ii |
| Owner, Nickel Lake pyrites claim. | 296 | xi | ref. to..... | 201 | ii |
| Statement by, re iron on Nickel lake | 135 | xi | | | |

| | Page. | Vol. | | Page. | Vol. | |
|--|----------|--------|---|-----------|--------|-----|
| Prince Edward Peat Fuel Co. | 21 | ix | Prospectors. | | | |
| Town, DARTMOOR, ENGLAND. | | | Coal located by, in Silurian..... | 203 | ii | |
| Lit by peat fuel gas..... | 209 | ii | Delusions of..... | 219 | v | |
| tp., ALG. | | | Forest fires caused by..... | xx | R C | |
| Gold and silver in..... | 60 | R C | Hints to, copper, L. Superior..... | 88 | iii | |
| Princess gold mine, JAFFREY TP., | | | determination of miner- | | | |
| R.R.D. | | | als..... | 203-229 | vi | |
| Notes on, 1898..... | 58, 110 | vii | Rainy Lake region..... | 52, 53 | iv | |
| Gold Mg. Co. | | | Ignorance of..... | 9 Bull. | iii | |
| <i>See also</i> last ref | | | Licences for, Michipicoten div. | | | |
| Capital and date of charter..... | 12 | vii | <i>See</i> Licences. | | | |
| lake, MICHIPICOTEN DIV., ALG. | 293 | A xiv | Protection for, required..... | 308 | R C | |
| Quarries Co. | | | Services of, require consideration. | xix | R C | |
| Sodalite mining by, Bancroft.... | 26 | A xvi | Prosser tp., NIP. | | | |
| Princeton, BLENHEIM TP., OXFORD | | | Rocks in..... | 192 | A xiv | |
| CO | 140 | iv | schists, stained by limo- | | | |
| Pringle, Henry A. | 41, 42, | vii | nite..... | 211 | A xiv | |
| | 56 | viii | Soil in, analysis..... | 246 | A xiv | |
| | 45 | ix | muskeg..... | 194 | A xiv | |
| W. R., | 105 | vii | requires drainage..... | 207 | A xiv | |
| tp., P. S. D. | | | Timber in..... | 192 | A xiv | |
| Limestone in..... | 94 | B xiii | 222-235 | A xiv | | |
| and graphite..... | 170, 171 | ix | windfalls..... | 195 | A xiv | |
| Printing presses. | | | Protogene. | | | |
| Canadian imports of, 1881-87, 248, | 254 | R C | Definition of..... | 540 | R C | |
| Pritchard, Capt. | 139 | viii | Gold Mines Co. | | | |
| Norman | | | Capital and date of charter..... | 5 | xii | |
| Manager for Nichols' Chemical | | | Foley mine worked by..... | 243 | xi | |
| Co..... | 80 | A xvi | Proton tp., GREY CO. | | | |
| W. | 109 | x | Terrace in, altitude..... | 176 | ix | |
| | 275 | xi | <i>Proteroz. a.</i> | | | |
| Pritchard,—? | | | Ottawa..... | 225 | x | |
| Underground Manager, West | | | Proudfoot, Hume B. | | | |
| End silver mine..... | 62 | A xvi | Acknowledgments to..... | 117 | v | |
| Harbour Copper Mg. Co. | | | 72 | vi | | |
| Capital and date of charter..... | 10 | ix | Description by, of location of | | | |
| Work by, 1899..... | 86 | ix | Bennett tp..... | 152 | v | |
| Prochlorite. <i>See</i> Chlorite. | | | Gold prospecting by, Seine river. | 4 Bull. | i | |
| Proctor, James | | | 74 | vi | | |
| Evidence by, before R. C. <i>et</i> — | | | 94 | viii | | |
| competing with Europeans in | | | 39 | A xvi | | |
| copper and iron..... | 234 | R C | Proudfoot's line, NIP. | | | |
| copper on Flat Point island.... | 114 | R C | Rocks on, near Vermilion river.. | 170 | vi | |
| P. R. | 105 | x | Proudlock, Hamilton | 64 | viii | |
| tp., ALG. | | | Proulx, Paul | | | |
| Granite in..... | 69 | i | Gold mining by, L. of the Woods | 182 | v | |
| Producers' Oil, Gas and Mg. Co. | | | Prouslite. | | | |
| Capital and date of charter..... | 12 | vii | Annaberg and Joachimsthal..... | 61 | B xiv | |
| Wells of, number..... | 44 | xi | Prout, Frank | | | |
| Oil Refining Co. | | | Evidence by, before Roy. Com. | | | |
| Notes on, by the manager..... | 164 | R C | <i>re</i> Wellington and Bruce mines. | 101, 378, | 104 | R C |
| Tanking Co. | | | Providence Gold Mg. Co. | | | |
| Notes on, by W. Hammond..... | 166 | R C | Capital and date of charter..... | 12 | vii | |
| <i>Proetus.</i> | | | Provident Mining Co. | | | |
| Kwataboahagan river, notes by | | | Capital and date of charter..... | 38 | A xiii | |
| Parks..... | 191 | A xiii | Provincial Assay Office, BELLEVILLE. | | | |
| photo..... | 192 | A xiii | Peat used in..... | 195 | xii | |
| <i>" crassinoteginitus.</i> | | | Photo of..... | 32, 33 | ix | |
| Cayuga N. tp..... | 146 | xii | Reports on work in, 1898..... | 281-289 | viii | |
| Progress Cobalt Silver Mg. Co. | | | 1899..... | 33, 34 | ix | |
| Capital and date of charter..... | 30 | A xvi | 1900..... | 148-150 | x | |
| Proper, Clara A. | 105 | viii | 1901..... | 76-79 | xi | |
| W. J. | 105 | viii | 1902..... | 68-72 | xii | |
| Proprietary Co. | | | 1903..... | 50, 51 | A xiii | |
| Camp of, Larder lake, photo..... | 212 | A xvi | 1904..... | 31-33 | A xiv | |
| Dolomite near claims of..... | 207 | A xvi | 1905..... | 36-38 | A xv | |
| | | | 1906..... | 47, 48 | A xvi | |

| | Page. | Vol. | | Page. | Vol. |
|--|----------|-------|---|---------------|-------|
| Provincial Bureau of Mines. <i>See</i> | | | Pukaskwa river, L. SUPERIOR. | | |
| Bureau of Mines. | | | Beaches on..... | 175 | ix |
| Natural Gas and Fuel Co. | | | level..... | 288 | A xiv |
| Boring by, Bertie tp..... | 91 | A xiv | Berries on..... | 154 | viii |
| Brantford tp..... | 108 | A xiv | Gold near mouth of..... | 147, 155 | viii |
| Colchester tp..... | 115 | A xiv | Brook trout in..... | 297 | A xiv |
| Willoughby tp..... | 113 | A xv | Fall of, in last 25 miles..... | 286 | A xiv |
| Buffalo supplied by..... | 25 | A xvi | Gorges on, photo..... | 283, 284 | A xiv |
| Crowland field operated by..... | 104 | A xiv | High hills on..... | 281 | A xiv |
| Notes on, 1890..... | 132-134 | i | Jaspilite near mouth of..... | 309 | A xiv |
| Production by..... | 44 | xi | Notes on, by J. M. Bell..... | 283, 284 | A xiv |
| Taxation paid by, 1900..... | 18 | x | Coleman..... | 137, 138 | viii |
| 1901..... | 41 | xi | Quartz vein near mouth of, photo..... | 353 | A xiv |
| 1902..... | 39 | xii | Rocks on and near..... | 143 | viii |
| silver mine, COLEMAN TP., NIP. | | | conglomerate..... | 313 | A xiv |
| Discovery and development of..... | 8-10 | A xvi | granite..... | 166 | viii |
| Photo of..... | 9 | A xvi | iron-bearing..... | 167 | xi |
| Pruden, A. | 105 | vii | Keweenaw..... | 346 | A xiv |
| Prudhomme, William. | 32 | viii | schists..... | 336, 349 | A xiv |
| Prues nickel mine (WD 252), BO- | | | Shores east and west of, descrip- | 305, 316 | A xiv |
| WEILL TP., NIP. | | | tion..... | 168 | viii |
| Minerals in..... | 95 | c xiv | Trees on..... | 306 | A xiv |
| zinc-blende..... | 121 | c xiv | Waterpower on..... | 133, 134 | vii |
| Rocks in..... | 201, 213 | A xii | | 296 | A xiv |
| | 71 | c xiv | | 299 | A xiv |
| <i>Prunus pennsylvanica.</i> <i>See</i> Cherry. | | | Pulp mill. | | |
| " <i>reginaana.</i> <i>See</i> Cherry, choke | | | Sault Ste. Marie, erection..... | 91 | xi |
| Prussia. | | | notes by Cole- | 154 | ix |
| <i>See also</i> Germany. | | | man..... | 13 | A xv |
| Arsenic production of, 1895-99..... | 110 | xi | Sturgeon Falls..... | 13 | A xv |
| Cobalt..... | 70 | B xiv | Webbwood..... | 22 | B xv |
| Mining schools in..... | 513 | R c | wood. | | |
| Nickel imports of, 1893-98..... | 215 | ix | <i>See also</i> Poplar and Spruce. | | |
| Peat-bogs of, consular report..... | 212-214 | ii | Abitibi dist..... | 208, 249 | A xiv |
| Prussic acid. | | | Black river..... | 187, 188 | xii |
| From acetylene..... | 33 | v | Batchawana bay..... | 206 | vii |
| Prym, William. | 236 | v | Carp river..... | 203 | viii |
| Przibram, AUSTRIA. | | | Distribution of..... | 128 | viii |
| Mining school at..... | 513 | R c | Industry of, line for..... | 120, 121 | iv |
| Ptarmigan. | | | 2, 3, 13..... | 61, 62 | x |
| Abitibi dist..... | 243 | A xiv | sulphuric acid for..... | 199, 200 | A xvi |
| bay, L. OF THE WOODS, R.R.d. | | | Lac Seul..... | 62 | v |
| Gold mining on. <i>See</i> Queen of | | | Mattagami valley..... | 127, 128 | A xv |
| Sheba mine. | | | Niven's base line, Alg., south of..... | 142 | ix |
| Minor ref. to..... | 104 | vi | Rainy lake..... | 162 | v |
| <i>Pterinea glabella.</i> | | | Whitfish valley, R. R. d..... | 239 | R c |
| Stony pt., L. Huron..... | 155 | xii | Pumice. | | |
| <i>Pteris aquilina.</i> | | | Description of..... | 540 | R c |
| Abitibi Lake dist..... | 212 | A xiv | Notes on, by Miller..... | 235 | vi |
| Mattagami valley..... | 151 | A xv | Price of, 1898..... | 238 | viii |
| Pubilov, RUSSIA. | | | Pump lake, SNIDER TP., ALG. | | |
| Molybdenum used at iron works | | | Rocks on and near..... | 40, 50 | c xiv |
| of..... | 46 | xi | Pumpelly, Prof. Raphael | | |
| Pucaswa river. <i>See</i> Pukaskwa | | | Iron mining by, W. of Port | | |
| river. | | | Arthur..... | 69, 75 | ii |
| Pucherite. | | | Surveying by, S. R. d..... | 129, 130, 133 | xi |
| Schneeberg, Saxony..... | 90 | B xiv | Work by, on copper-bearing | | |
| Puddicombe, John. | 24 | vi | rocks of L. Superior, ref. to..... | 84, 87 | iii |
| Pudding rapid, ABITIBI RIVER | | | Pumpkins. | | |
| Notes on vicinity of..... | 187 | viii | Grown at Fort Matachewan..... | 240 | A xiv |
| Pudding stone. <i>See</i> Jasper conglom- | | | Punk lake, MICHIGICOTEN DIV., ALG. | | |
| erate. | | | Iron-bearing rocks near..... | 315 | A xiv |
| Pudding (iron). | | | Minor ref. to..... | 294 | A xiv |
| Description and invention of..... | 359 | R c | Purchas, T. A. R. | | |
| Pukaskwa harbour, L. SUPERIOR. | | | Gold mining by, L. of the Woods..... | 58 | viii |
| <i>See also</i> next ref. | | | | | |
| Geology of..... | 133 | viii | | | |

| | Page. | Vol. | | Page. | Vol. |
|---|----------|--------|---|----------|--------|
| Purdon, Edward | 194 | i | <i>Pyrola chlorantha</i> | | |
| Purdy, R. | | | Abitibi dist..... | 241 | A xiv |
| Oil on farm of, E. Tilbury tp.... | 98 | A xvi | Mattagami valley..... | 150 | B xv |
| apatite mine , Loughboro tp., | | | <i>flottica</i> | | |
| Frontenac co. | | | Mattagami valley..... | 150 | B xv |
| Notes on, by Moore..... | 171 | R C | <i>minor</i> | | |
| "Puritan" s.s. | | | Abitibi dist..... | 241 | A xiv |
| Arnour of..... | 149 | iii | Mattagami valley..... | 150 | A xv |
| Purnall, Otto F. | 182, 187 | v | <i>rotundifolia</i> | | |
| Purple copper ore. See Bornite. | | | Abitibi dist..... | 241 | A xiv |
| Pursell, M. | 106 | x | <i>rotundifolia</i> var. <i>incarnata</i> | | |
| | 256 | xi | Abitibi dist..... | 241 | A xiv |
| Pursey, William | 79 | ii | Mattagami valley..... | 150 | A xv |
| Pusey, C. J. | | | <i>secunda</i> | | |
| Evidence by, before R. C. re:— | | | Abitibi dist..... | 241 | A xiv |
| iron ores, cost of production | 388, 389 | R C | Mattagami valley..... | 150 | A xv |
| Haliburton dist. 52, 131 | | R C | Pyrolusite or Manganite (MAN- | | |
| locations, laws <i>re</i> | 326 | R C | GANESE OXIDE). See also Manganese. | | |
| market in U. S. | 234 | R C | Batchawana bay..... | 202 | ix |
| Statement by <i>re</i> :— | | | Definition of..... | 540 | R C |
| iron mining in Haliburton dist | | | Hardness of..... | 202 | vi |
| 61, 62 | | ii | Notes on, by Goodwin..... | 216 | vi |
| Snowdon tp. | | | Specific gravity of..... | 202 | vi |
| 334, 335 | | R C | Use of..... | 540 | R C |
| Hastings dist. | | | Pyroxene. | | |
| 111, 112 | | ii | Associated with apatite. 178, 437, 442 | | R C |
| Puslinch, PUSLINCH TP., WELLING- | | | Loughboro tp..... | 53, 168 | R C |
| TON CO. | | | Ottawa co., Que..... | 438 | R C |
| Guelph formation in..... | 50, 121 | B xiii | Corundum mistaken for..... | 61 | vi |
| analysis..... | 122 | B xiii | Determination of..... | 205 | vi |
| gore , WELLINGTON CO. | | | Exhibited at World's Fair..... | 188 | ii |
| Limestone in, analysis. See Wel- | | | Hardness of..... | 202 | vi |
| lington quarry. | | | Notes on, by Goodwin..... | 226 | vi |
| Guelph formation..... | 121 | B xvi | Occurrences of..... | 207 | ix |
| Put-in-Bay island, L. ERIE. | | | Specific gravity of..... | 202 | vi |
| Strontianite in..... | 127 | xi | Pyroxenite. | | |
| Putnam co., N. Y. | | | Beaver inlet, L. of the Woods, | | |
| Pyrrhotite from, analysis..... | 163 | ii | petrography..... | 146 | vii |
| Pye island, L. SUPERIOR. See Pie | | | Haliburton co..... | 47 | xi |
| island. | | | Methuen tp..... | 214 | viii |
| Pym --? | 81 | vii | North Burgess tp..... | 440 | R C |
| Pyne, Dr. R. A. | | | Ottawa co., Que., with apatite... 437 | | R C |
| Boring by, for graphite, MacCue. | 59 | xi | Bowman tp..... | 440 | R C |
| | 26 | xii | Pyrrhotite. | | |
| Exhibit of, at Pan-American Ex- | | | See also Nickel and Sudbury. | | |
| hibition..... | 87, 90 | xi | Composition of..... | 15 | C xiv |
| tp., Nip. | | | paper by Emmens..... | 163-166 | ii |
| Explorations in, by Kerr..... | 125 | A xv | Description of..... | 192 | ii |
| Pyralloite. See Rensselaerite. | | | Determination of..... | 203 | vi |
| Pyramid, The Great | | | For sulphuric acid, advisability of. | 200 | A xvi |
| Mortar in, character of..... | 12 | B xiii | Gap mine, Penn..... | 146 | C xiv |
| Pyrrargyrite (RUBY SILVER). | | | analysis..... | 163, 165 | ii |
| Cobalt dist..... | xi | A xiii | Grant co., Oregon..... | 71 | B xiv |
| | 12-14 | B xiv | Hardness of..... | 202 | vi |
| Joachimsthal, Bohemia..... | 61 | B xiv | Magnetic permeability..... | 324 | xii |
| Notes on, by Goodman..... | 207, 208 | vi | Notes on, by Miller..... | 213 | vi |
| Saxony..... | 61, 74 | xiv | Occurrences..... | 192, 207 | ix |
| Waterhen creek, Alg., (trace) | | | | 200 | A xvi |
| | 131, 132 | A xv | Piedmont, Italy..... | 116 | C xiv |
| Pyrite. See Iron pyrites. | | | Specific gravity of..... | 202 | vi |
| arsenical See Mispickel. | | | Symbol for..... | 192 | ii |
| capillary See Millerite. | | | | | |
| copper See Chalcopyrite. | | | | | |
| iron See Iron pyrites. | | | | | |
| magnetic See Pyrrhotite. | | | | | |
| white iron See Marcasite. | | | | | |
| Pyritic island, L. SUPERIOR. | | | | | |
| Plumbago on..... | 124 | ix | | | |
| | | | Annina-Nipissing lake, Nip..... | 53 | A xvi |
| | | | Brunel tp..... | 59 | xi |
| | | | Cobalt dist..... | 101 | A xiii |

| | Page. | Vol. | | Page. | Vol. |
|--|-----------------|-------|---|----------|--------|
| Pyrrhotite. — <i>Con.</i> | | | Quackageshick, Louis. | 187 | vii |
| Dalhousie tp..... | 138 | R C | lake, MICHIGICOTEN DIV., AIG. | 294 | A xiv |
| Elizabethtown tp..... | 207 | ix | Quackenbush, V. | | |
| Ferrie tp..... | 170 | ix | Gold mining by, Maniton Lake | | |
| Foley tp..... | 167 | ix | dist..... | 77 | vii |
| Haliburton co., Galway tp..... | 207 | ix | | 76 | viii |
| Glamorgan tp..... | 200 | A xvi | | 62 | ix |
| Harcourt tp..... | 47 | xi | Quade (NOT QUOD), A. F. F. | 40 | A xiv |
| Hastings co..... | 207 | ix | Quaquaquitchwanook lake, E. OF | | |
| Hungerford tp..... | 200 | A xvi | FREDERICK HOUSE LAKE, NIP. | | |
| with magnetite..... | 157 | A xvi | Notes on, by Parks..... | 179 | viii |
| | 197 | xi | Quarries. | | |
| Lake of the Woods dist:— | | | <i>See also</i> Limestone, Sandstone, | | |
| associated with gold..... | 37 | iv | Gypsum, etc. | | |
| Kenora, near..... | 192 | ii | Industry of, 1890..... | 95-105 | i |
| McConkey tp..... | 262 | viii | 1897..... | 98, 99 | vii |
| | 171 | ix | 1898..... | 48 | viii |
| Michipicoten div..... | 11 Bull. iii | | 1899..... | 109-111 | ix |
| Boyer lake (near)..... | 168 | xi | Limestone, report by Miller .. | 26-126 | B xiii |
| Missinaibi river, Split-rock rapid. | 256 | v | Quarry island, L. OF THE WOODS. | | |
| Net lake, Timagami dist..... | 173 | ix | Gneiss on..... | 16 | iii |
| Nickel lake (near), Watten tp.... | 134 | xi | for masonry..... | 14 | iii |
| Olden tp..... | 207 | ix | Gold mining near. <i>See</i> Ophir | | |
| | 200 | A xvi | mine. | | |
| Parry island..... | 168 | ix | Minor ref. to..... | 173 | v |
| | 261 | viii | Quarters, N. | 143 | x |
| Pipestone lake..... | 61, 74 | iv | | 75 | xi |
| Port Arthur silver dist..... | 58 | B xiv | Quartz. | | |
| Riddell siding (near), R. R. d.... | 176 | A xvi | Auriferous. <i>See</i> Gold. | | |
| Rosspoint (near)..... | 109 | v | Copper Cliff, mining of, for flux.. | 121 | xii |
| Round lake (near), Th. B. d.... | 75 | x | | 76 | C xiv |
| Schreiber (near)..... | 78, 134 | vii | | 26 | A xvi |
| Sudbury dist..... | 88, 89 | i | value..... | 4, 6 | A xvi |
| | 14, 15, 75, 116 | C xiv | Crystal occurrences of..... | 208 | ix |
| | 207 | ix | Cubic expansion of, under heat.. | 136 | iii |
| analysis..... | 163, 165 | ii | Determination of..... | 205, 223 | vi |
| | 208 | ix | Exhibit of, at Chicago..... | 187 | ii |
| Bleazard tp..... | 433 | R C | Hardness of..... | 448, 535 | R C |
| Blue lake..... | 74, 158 | C xiv | | 201, 202 | vi |
| description..... | 158 | C xiv | | 214 | vii |
| evidence before R. C. 103-106 | | R C | Hints on, to prospectors..... | 450 | R C |
| Garson tp..... | 36 | viii | In building-stone..... | 133 | iii |
| Levack tp..... | 274 | v | Notes on..... | 540 | R C |
| McKim tp..... | 78 | C xiv | by Goodwin..... | 223, 224 | vi |
| notes by Bell..... | 23 | R C | Specific gravity of..... | 202 | vi |
| Snider tp..... | 21 | xi | Waters tp., mined for flux..... | 64 | A xvi |
| Creighton mine.. | 34, 111 | C xiv | Creek Gold Mining Co. | | |
| Vermilion river, near | | | Capital and date of charter..... | 10 | ix |
| Bronson lake..... | 152 | x | diorite. | | |
| Wanapitei lake, discov- | | | Wabigoon Lake dist..... | 183 | vii |
| ery..... | 431 | R C | island, L. OF THE WOODS, R. | | |
| Worthington mine..... | 192 | ii | R. D..... | 119 | vii |
| | 280 | xii | mica diorite. | | |
| lake, MICHIGICOTEN DIV. | | | Sultana island, petrography..... | 122 | vi |
| Canoe route to..... | 294 | A xiv | porphyry. | | |
| Iron ore near, notes by J. M. | | | Couchiching falls, Abitibi river.. | 211 | A xiv |
| Bell..... | 315, 332 | A xiv | L. of the Woods..... | 103 | vi |
| pyrrhotite..... | 332 | A xiv | Maniton lake, petrography..... | 84 | iv |
| Minor refs. to..... | 286, 293 | A xiv | Michipicoten div., Helen mine, | | |
| Schist near analysis and notes. | | | photo. 160, 161 | | xi |
| | 305, 306 | A xiv | Mama in se | | |
| <i>Pyrus americana.</i> <i>See</i> Ash, mountain | | | pen..... | 69, 70 | iii |
| | | | petrography..... | 177 | xi |
| | | | Michipicoten island, notes by | | |
| | | | Coleman..... | 171 | viii |
| | | | Round lake, E. of Moss tp., | | |
| | | | auriferous..... | 76, 87 | v |
| | | | Sandy portage, Mattagami river. | 211 | A xiv |
| | | | Wabigoon Lake dist..... | 183 | vii |

| | Page. | Vol. | | Page. | Vol. |
|--|---------------|--------|---|----------|--------|
| Quartz, smoky <i>See</i> Cairngorm. | | | Queen Bee Gold Mining Co. | | |
| syenite. | | | Capital and date of charter..... | 12 | vii |
| French river..... | 67 | i | Work by, 1898..... | 54 | viii |
| Sudbury dist..... | 434 | R C | City Mining and Develop- | | |
| Quartzite. | | | ment Co. | | |
| Aberdeen tp., petrography..... | 77 | A ziii | Capital and date of charter..... | 30 | A xvi |
| Algoma-Nipissing line, ancient | | | gold mine, L. OF THE WOODS, | | |
| gorge in hills of..... | 182 | vi | R. R. D. | | |
| Association of, with apatite..... | 438 | R C | Notes on, 1896..... | 49 | vi |
| Definition of..... | 540 | R C | of Sheba gold mine, P'tak- | | |
| 236 | vi | | MIGAN BAY, L. OF THE WOODS, | 174 | v |
| Huronian areas..... | 71, 72 | i | of the Lakes Gold Mg. and | | |
| notes by Bell..... | 20 | R C | Development Co. | | |
| Larder lake, section showing.... | 205 | A xvi | Capital and date of charter..... | 12 | vii |
| Ottawa co., Que..... | 21 | R C | Queen's University, KINGSTON. | | |
| Sudbury dist., Denison tp., for lin- | | | Notes on, 1890..... | 215, 216 | i |
| ing converters..... | 88 | C xiv | Photo..... | 48, 49 | x |
| petrographical | | | Queensboro, ELZEVIK TLE, HASTINGS | | |
| notes..... | 289, 290 | xii | CO. | | |
| photo of, with slate. | | | Gold mining near. <i>See</i> Sophia | | |
| 272, 273 | xii | | mine. | | |
| Timiskaming lake, photo..... | 49 | B xiv | Pyrites mine at..... | 20 | A xv |
| Wabigoon Lake dist..... | 183 | vii | 25, 185 | A xvi | |
| gold mine, GOLD CREEK, MAT- | | | notes and photos..... | 160-162 | A xvi |
| AWIN RIVER. | | | water in, excessive..... | 189 | A xvi |
| Minor ref. to..... | 86 | vi | Silver mining near..... | 91 | A xvi |
| Notes on, by Blue..... | 129 | v | Queensland, AUSTRALIA. | | |
| Ore of, reported value..... | 113 | v | Mineral land in, ownership of.... | 44 | i |
| Rocks of and near..... | 82, 87 | v | Mining laws of..... | 295 | R C |
| Quasis lake, BLANCHE RIVER REG., | | | Prospecting in, with Govt. drills. | | |
| NIB. | | | 165, 166 | iii | |
| Description of, by Miller... 222, | 223 | xi | Royalty in, on minerals, <i>ult.</i> | 45 | i |
| Jasper conglomerate on..... | 230 | xi | Queenston, NIAGARA TLE, LINCOLN | | |
| Quaternary period. | | | CO. | | |
| Definition of..... | 540 | R C | Beach at..... | 227 | A xiii |
| Quays gravel pit, N. OF PORT HOPE, | | | Cement works at, notes..... | 108 | i |
| DURHAM CO. | | | <i>See also</i> Queenston Quarry Co. | | |
| Beaches near..... | 235 | A xiii | Gravel and sand near, for build- | | |
| Gravel of, used for ballast..... | 238 | A xiii | ing..... | 12 | iv |
| Quebec province. | | | Historical associations..... | 163 | A xiv |
| Apatite of, paper by Penrose. 436-443 | | R C | Limestone of, quality..... | 14 | A xiii |
| Asbestos from, mainly supplies | | | quarries..... | 95, 96 | i |
| the world..... | 189 | ii | 73 | B xiii | |
| Fuel resources of..... | 196-197 | ii | Quarry Co. | | |
| Iron exports from, 1887..... | 225 | R C | Capital and date of charter..... | 12 | vii |
| ores, compared to those in | | | Exhibit of, at Buffalo..... | 87, 90 | xi |
| Ont..... | 51 | ii | Notes on..... | 163, 164 | A xiv |
| Mining laws of, notes by R. C. 269-271 | | R C | Producing, 1902..... | 28 | xii |
| Oil in..... | 196 | ii | Quicklime. | | |
| and Lake Superior Mg. Asso. | | | Definition of..... | 540 | R C |
| 60, 256 | R C | | Uses of..... | 5, 6 | B xiii |
| harbour, MICHIPICOTEN IS-LAND, | | | Quicksand. | | |
| L. HURON | 143, 144, 154 | viii | Iekta lake, Algoma..... | 39 | iii |
| Land and Mining Co. | | | Quicksilver. <i>See</i> Mercury. | | |
| Early mining by..... | 208 | v | Quigley, G. B. | 105 | vii |
| notes by Palmer. 171-174 | | ii | 105 | viii | |
| Floatation and failure of... 97, 98, 103 | | R C | 117 | ix | |
| mine, MICHIPICOTEN ISLAND. | | | 48, 50, 132 | x | |
| Notes on, by Coleman..... | 143 | viii | Quincke, Dr. Frederick | | |
| Mining Co. | | | Experiments by, on nickel ore, | | |
| Capital and date of charter..... | 10 | x | ref. to..... | 107 | viii |
| "Queen," S.S. | 186 | v | Nickel plating by..... | 159 | ii |
| Alexandra gold mine, NEAR | | | Quinlan, H. <i>See</i> Quinlan and Robert- | | |
| MANITOR LAKE, R. R. D. | | | son. | | |
| Notes on, 1905..... | 51 | A xv | and Robertson. | | |
| Bee island, L. OF THE WOODS, | | | Limestone quarry of, at Crook- | | |
| R. R. D. | | | ston..... | 93 | vii |
| Gold prospecting on..... | 49 | vii | 48 | viii | |
| 54 | viii | | 61 | B xiii | |

| | Page. | Vol. | | Page. | Vol. |
|---|----------|--------|--|----------|--------|
| Quinn, Barney | 54 | A xiii | Rabbit. <i>Con.</i> | | |
| John | 105 | xi | Michipicoten div. | 297 | A xiv |
| quarry , ROSS TP., RENFREW CO. .... |  |  | ..... | 200 | A xv |
| Notes on stone from | 106 | B xiii | Nipigon Lake dist. | 139 | A xvi |
| Quinze lake , PONTIAC CO., QUE. | | | Niven's base line, Alg., scarce ... | 142 | ix |
| Route from, to height-of-land, | | | island , DOG LAKE, ALG. | | |
| description | 227 | xi | Rocks on | 202 | A xv |
| river , TIMISKAMING LAKE, QUE. | | | Huronian | 188 | vii |
| Geology of, notes by Miller | 226 | xi | Striae on, direction | 197 | vii |
| Iron ore on and near | 23 | R C | lake , TIMAGAMI DIST., NIP. | | |
| ..... | 201 | x | Rocks on and near | 172 | ix |
| ..... | 230 | xi | arkose | 74 | i |
| magnetite | 54 | ii | metamorphosed | 38 | B xiv |
| specular | 142 | R C | Striae on, direction | 178 | ix |
| Olivine diabase on | 229 | xi | Timber on | 58 | R C |
| Slates on | 41 | B xiv | pine | 119 | iv |
| Quirk, Cornelius | | | mt. , PORT ARTHUR DIST., TH. | | |
| Gold mining by, Manitou lake .. | 86 | vi | B. D. | | |
| ..... | 77 | vii | Silver on, discovery | 122 | iv |
| Killed | 27 | ix | Mountain group , PORT ARTHUR | | |
| William | | | DIST., TH. B. D. | | |
| Gold mining by, Manitou lake .. | 86 | vi | Notes on, by Miller | 57 | B xiv |
| ..... | 77 | vii | Mountain Junior silver mine , | | |
| Witness in accident | 27 | ix | RABBIT MT., TH. B. D. | | |
| Quirt, Albert | 231 | iv | Controlled by Algoma Mg. Co. ... | 96 | xii |
| <i>Quiscidulus quiscidulanicus</i> . See Grackle, | | | Notes on, 1899 | 85 | ix |
| bronzed | | | Mountain Mg. Co. | | |
| Quod . Misprint for Quade. | | | Capital and date of charter | 12 | vii |
| Quodville , LYNDOCH TP., RENFREW | | | Mountain silver mine , LYB- | | |
| CO. | 235 | vii | STER TP., TH. B. D. | | |
| Quotations. | | | Acquired by Algoma Mg. Co. | 96 | xii |
| Ballantyne's Hudson Bay | 168 | v | Dominion Gold Mg. Co. 50, 96 | | viii |
| Ecclesiastes | 74 | B xiv | American capital in | 199 | R C |
| Genesis | 107 | iii | Pepth of, 1900 | 35 | ix |
| Isaiah and Job | 166, 168 | i | Discovery of | 35 | R C |
| Linneus | 89 | iii | Fault in | 238 | iv |
| Story's Cleopatra | 203 | v | Fluorspar in | 198 | R C |
| Wordsworth's Peter Bell | 2 | B xiii | Mineral water in | 54 | B xiv |
| | | | Minor ref. to | 5 | A xv |
| R 20 silver loc. , SCOBLE TP., TH. | | | Notes on, 1899 | 85 | ix |
| B. D. | | | Operations of, 1893 | 181 | iii |
| Notes on, 1892 | 240, 241 | ii | Silver in, form of | 33 | R C |
| 71 gold loc. , OSINAWA LAKE, | | | argentite | 194 | ix |
| R. R. D. | 74 | vi | surface specimens, statistics ... | 63 | R C |
| 400, 401, 404 iron locs. , ATIRO- | | | Veins in, course of | 33, 198 | R C |
| KAN RIVER, R. R. D. | 142 | v | Veinstones of | 57 | B xiv |
| ..... | 133 | xi | Racket river , DUNDAS CO. | | |
| 526 iron loc. , NEAR GREENWATER | | | Limestone on | 40 | B xiii |
| LAKE, TH. B. D. | | | Calciferous | 47 | B xiii |
| Notes on, by Coleman | 81 | v | Racine , WISCONSIN. | | |
| 559 gold loc. , NEAR ROUND LAKE, | | | Niagara formation at | 92 | v |
| SHEBANDOWAN LAKE DIST. ... | 76 | v | Radcliffe, Brainerd | 175 | R C |
| 567, 568 gold locs. , JACKFISH | | | tp., RENFREW CO. | | |
| BAY, L. SUPERIOR. | | | Corundum in | 222 | vii |
| Notes on, by P. McKellar, 189, 190 | | v | ..... | 223, 224 | viii |
| 569 gold loc. See Empress gold | | | See also Canada Corundum Co. | | |
| mine. | | | Syenite in | 230 | vii |
| 606 iron loc. See Davis Sulphur | | | Radium. | | |
| Ore Co. | | | Uraninite a source of | 12, 62 | B xiv |
| 704, 705 iron locs. , NEAR PE- | | | Radishes. | | |
| WABIC LAKE, R. R. D. | 130 | xi | Mentioned as growing at : | | |
| Raamses , EGYPT. | | | Abitibi lake | 50 | A xvi |
| Bricks of | 107 | iii | Fort Matachewan | 240 | A xiv |
| Rabbit. | | | New Post, Abitibi river | 186 | viii |
| Abitibi dist | 189 | xii | Radnor iron mine , GRATTAN TP., | | |
| decrease of | 186, 193 | viii | RENFREW CO. | | |
| Hinterland, The | 133 | iv | Accident at | 47 | xii |
| L. of the Woods | 120 | vii | Mining class at | 39 | A xv |
| | | | Minor ref. to | 14 | A xiv |

| | Page. | Vol. | | Page. | Vol. |
|--|------------|------|-----------------------------------|--------------|------|
| Radnor iron mine. — <i>Con.</i> | | | Rainham tp., HALDIMAND CO. | | |
| Notes on, 1901 | 259 | xi | Gas in | 108 A | xv |
| 1902 | 20, 114 | xii | Rains, H. D. | 105 | vii |
| 1903 | 94 | xiii | | 105 | viii |
| 1904 | 77 A | xiv | Rainy lake, ONT. AND U.S. | | |
| 1905 | 39, 95 A | xv | Agricultural land N. of | 207 | v |
| 1906 | 80, 81 A | xvi | Altitude of | 44 | iv |
| Ore of, character | 20 | xii | Beryl from | 193 | ii |
| shipped to Que. | 7 A | xiii | | 237 | vii |
| Photos of | 160, 161 | xii | | 195 | ix |
| | 112, 113 A | xiii | Depth of; fish in | 44 | iv |
| Producing, 1906-7 | 16 A | xvi | Gold on, early knowledge | 13 | iii |
| Forges, FERMONT, CHAMPLAIN | | | | 123 | iv |
| CO., QUE. | | | galena in | 38 | ix |
| Charcoal iron produced at | 191 | ii | mining | 62, 63 | v |
| notes on furnace | 24-27 | ii | <i>See also</i> Rainy Lake City. | | |
| statistics and bounties | 29 | ii | Indian reserve on, area | 167 | v |
| Limonite at | 215 | vi | Iron ore on | 144 | R C |
| Rae, T. C. | 105 | vii | mining. <i>See</i> Seine bay. | | |
| Ragged chute, MADAWASKA RIVER. | | | prospecting | 141 | xi |
| Diopside at | 197 | ix | Lignite on, reported | 125 | iv |
| Pargasite at | 206 | ix | Minerals on, evidence before R.C. | 64, 65 | R C |
| rapid, SEVERN RIVER. | | | Notes on, by Blue | 161 | v |
| Waterpower from, for Orillia | 14 A | xv | Rocks on and near | 272 A | xiv |
| Raglan tp., RENFREW CO. | | | agglomerate | 130 C | xiv |
| Corundum in | 64, 65 | vi | conglomerate | 184 | ix |
| mining | 20 | ix | Couchiching series | 82 | v |
| | 130 | x | Huronian | 18 | R C |
| | 294 | xi | | 124 | iv |
| mill for | 25 | x | Keewatin, Lawson's views | 186 | ix |
| notes by Blue | 246 | vii | limestone | 100 B | xiii |
| Miller | 220, 225 | vii | petrography | 77-96 | iv |
| | 222, 223 | viii | | 154, 155 | vii |
| photo of crystals | Facing 222 | viii | Shores of, indented, reason for | 203 | v |
| rocks bearing. Between | 232, 233 | viii | Staurolite crystals on | 210 | ix |
| production, 1904 | 18 A | xiv | Survey of, by Coleman, ref. to | 3 | v |
| 1905 | 19 A | xv | Trees on | 162 | v |
| Tests on | 240 | viii | pine | 119 | iv |
| <i>See also</i> Canada Corundum Co. | | | Water of | 44 | iv |
| Gahnite in | 198 | ix | Lake City, MISS. | | |
| Garnet in | 211 | vii | Creation of | 53 | iv |
| Nepheline-syenite in | 226, 229 | vii | Gold mining near | 6 Bull. | i |
| notes by Coleman | 252 | viii | stamp mill | 41, 43 | iv |
| Silurian boulders in | 213 | vii | Schist near, chloritic | 85 | iv |
| Spinel in | 237 | viii | region, R. R. D. | | |
| Railroader's Gold Mg. Co. | | | Diamonds in, possibility of | 124 | ix |
| Capital and date of charter | 12 | vii | Fauna and flora of | 95-97 | iv |
| Work by, 1898 | 42, 92, 93 | viii | Geological nomenclature of | 272 A | xiv |
| Railway Land Subsidy Act. | 241 | R C | Gold mining in | 227, 230 | iv |
| Railways. | | | report by Coleman | 40-98 | iv |
| Dependent on mineral freight | 410 | R C | Huronian conglomerates of, notes | | |
| Mileage of Canada (1891) | 110 | ii | by Coleman | 184 | ix |
| Need of, Abitibi dist. | 116 A | xiii | Indians of | 97, 98 | iv |
| for mining industry | 239-241 | R C | Map of | With Vol. | iv |
| North Bay to L. Timiskaming, | | | Petrography of | 77-96 | iv |
| suggested | 179 | x | Report on, by Coleman | 40-67 | iv |
| Rainy River dist., possibility of | | | Mg. and Power Co. | | |
| electric | 133 | v | Work by, 1900 | 100 | x |
| Responsible for discoveries in | | | river, R. R. D. | | |
| Cobalt dist | 96 A | xiii | Agricultural land in valley of | 65, 207 | R C |
| | 9 B | xiv | | 41, 107, 117 | iv |
| | 3, 134 C | xiv | | 90, 91 | v |
| Sulbury dist | 286 | xii | | 147 | xi |
| Rainfall. | | | notes by Blue | 163-165 | v |
| Abitibi dist. | 129 A | xiii | Simpson | 207 | v |
| | 240 A | xiv | reason for | 202 | v |
| Moose Factory | 107 | iv | Beryl crystals from, exhibited at | | |
| Supply of, for artesian wells | 51 | i | Chicago | 190 | ii |

| | Page. | Vol. | | Page. | Vol. |
|--------------------------------------|----------------|------|--|-----------|------|
| Rainy river.—<i>Con.</i> | | | Rainy River district.—<i>Con.</i> | | |
| Description by Ballantyne..... | 208 | v | Mining lands in, statistics of sales | | |
| Early French fort on..... | 197 | v | and leases.— <i>Con.</i> | | |
| Indian reserve on, area..... | 167 | v | 1895..... | 9 | v |
| Iron on..... | 184 | ix | 1896..... | 10 | vi |
| | 135 | xi | 1897..... | 14, 15 | vii |
| Length of..... | 166 | v | 1898..... | 10 | viii |
| Lignite on, evidence of..... | 52 | R C | 1899..... | 11 | ix |
| Lumbering on..... | 117 | iv | 1900..... | 10 | x |
| Navigation on..... | 103 | iv | 1901..... | 12 | xi |
| suggested improvement..... | 247 | vi | 1902..... | 10 | xii |
| Rocks on, Conchiching..... | 153 | vii | 1903..... | 36 A | xiii |
| limestone..... | 100 B | xiii | 1904..... | 23 A | xiv |
| boulders, burnt for lime..... | 76 | iv | 1905..... | 24 A | xv |
| | 51 | v | 1906..... | 26 A | xvi |
| sandstone..... | 184 | ix | Pleistocene deposits of..... | 146, 147 | xi |
| Waterpower on..... | 161 | v | Pyrites deposits of, notes by | | |
| | 252 | vii | Fracleck..... | 175 A | xvi |
| | 14 A | xv | | | |
| River Development Co. | | | River Mining Co. | | |
| Capital and date of charter..... | 10 | x | Capital and date of charter..... | 12 | vii |
| Work by, 1900..... | 84, 85 | x | Work by, L. of the Woods dist.. | 7 | vi |
| district. | | | | 37 | ix |
| Geology of base and meridian | | | Rajah gold mine, JAFFRAY TP., | | |
| lines of, report by Parks..... | 161-182 | vii | R.R.D. | | |
| Gold mines of, report for:— | | | Notes on, by Blue..... | 28 | iii |
| 1894. Coleman..... | 40-98 | iv | <i>See also</i> Rajah Gold Mg. Co. | | |
| 1895. "..... | 47-71 | v | Gold Mg. Co. | | |
| Blue..... | 144-190 | v | Work by, Jaffray tp..... | 235 | ii |
| 1896. Coleman..... | 71-108 | vi | | 28 | iii |
| Slaght..... | 248-263 | vi | Re-construction of..... | 182 | v |
| 1897. Bow..... | 35-78 | vii | | | |
| Coleman..... | 109-132 | vii | Raleigh, R.R.D. | | |
| 1898. DeKalb..... | 41-47 | viii | Gold mining near..... | 123 | vii |
| Bow..... | 49-99, 263-274 | viii | | | |
| Bain..... | 276-279 | viii | Oil Co. | | |
| 1899. Bow..... | 36-81 | ix | Capital and date of charter..... | 9 | xii |
| 1900. "..... | 69-85 | x | tp., KENT CO. | | |
| 1901. Carter..... | 235-256 | xi | Limestone from, analysis..... | 68 B | xiii |
| 1902. Miller..... | 91-96 | xii | Natural gas in..... | 98, 100 A | xvi |
| 1903. Carter..... | 59-71 A | xiii | boring for..... | 127 | i |
| 1904. "..... | 44-57 A | xiv | Oil in..... | 26 A | xiii |
| 1905. Corkill..... | 48-59 A | xv | | 92 A | xvi |
| 1906. "..... | 55-60 A | xvi | boring for..... | 111 A | xiv |
| Iron ores of..... | 20, 22 | R C | flow ceased..... | 90 A | xiv |
| paper by Miller..... | 306-309 | xii | | 97 A | xvi |
| Limestone in, notes by Miller..... | 100 B | xiii | map showing wells..... | 93 A | xvi |
| Maps of..... | With Vol. iv | | notes..... | 40-42 | xii |
| gold region..... | Vol. v | | | 104 A | xvi |
| L. of the Woods dist.: | | | Ralph, James..... | 149 | viii |
| Bag and Bald Indian bays..... | 64, 65 | viii | Michael | | |
| Big-stone bay, locations..... | 173 | v | Guide to Coleman, 1906..... | 105 A | xvi |
| Kenora and Keewatin..... | 168 | v | Mining by, Michipicoten div.... | 118 | ix |
| northern portion..... | 12 | iii | | 143 | x |
| | With Vol. vi | | | 75 | xi |
| Regina bay..... | 180 | v | Rama tp., ONTARIO CO. | | |
| Sultana island..... | 15 | iii | Charcoal plant in. <i>See</i> Longford | | |
| Manitou Lake dist..... | With Vol. iv | | Mills..... | | |
| meridian and base lines..... | 172, 173 | vii | Glauconite in..... | 198 | ix |
| New Klondike dist..... | 80 | vii | Limestone in..... | 89, 90 B | xiii |
| Mining lands in, statistics of sales | | | analysis and notes..... | 90, 91 B | xiii |
| and leases, 1891..... | 7, 8 | i | Lithographic stone in..... | 6 B | xiii |
| 1892..... | 7 | ii | | | |
| 1893..... | 5 | iii | Ramsay, F. J..... | 137 | i |
| 1894..... | 10 | iv | W. H. | | |
| | | | Oil prospecting by, Bothwell | | |
| | | | field..... | 21 | vi |
| | | | Prof. William | | |
| | | | Ref. to paper by, on fergusonite..... | 236 | vii |

Many of these reports contain a great deal of geological and topographical matter.

| | Page. | Vol. | | Page. | Vol. |
|--|----------|------|---|---------------|------|
| Ramsay lake, McKim and Neelon | | | Ranger, Henry—Cont. | | |
| TPS., NIP. | | | Photo of..... | 166 c | xiv |
| Pyrrhotite on..... | 145 c | xiv | Prospector, Sudbury dist..... | 135 c | xiv |
| Rocks on, conglomerate..... | 208 | x | Rankin, Col. | 175 | ii |
| | 290 | xii | George..... | 219 | iv |
| 8, 93, 129 c | xiv | | E..... | 143 | x |
| diabase dikes..... | 434, 435 | R c | L..... | 75 | xi |
| | 297 | xii | R. F..... | 67 | xii |
| | 52 c | xiv | River, ACUSABLE RIVER..... | 37 B | xiii |
| gabbro..... | 296 | xii | | | |
| | 78 c | xiv | Ransford, John | | |
| quartzite..... | 77, 92 c | xiv | Evidence by, before R. C. re:— | | |
| lead mine, NEAR CARLETON | | | salt at Goderich..... | 189 | R c |
| PLACE, LANARK CO. | | | tariff..... | 236 | R c |
| Calcareous formation in..... | 41 | R c | See also Ransford, R. and J. | | |
| Notes on, by C. Clyms..... | 146 | R c | Ransford, Richard | | |
| tp., LANARK CO. | | | Boring by, for salt, Goderich..... | 189 | R c |
| Barytes in..... | 146 | R c | See also Ransford, R. and J. | | |
| | 195 | ix | R. and J. | | |
| Bog-iron ore in..... | 137 | R c | Salt works of..... | 111 | ix |
| Galena in..... | 198 | ix | | 38 | xii |
| Lead mining in. See Ramsay | | | | 22 A | xiii |
| lead mine. | | | | 23 A | xvi |
| Limestone in, analysis and quar- | | | Ransko, BOHEMIA. | | |
| ries..... | 72 B | xiii | Peat used at, for smelting..... | 207 | i |
| Cambro-Silurian. 37, 70 B | xiii | | Ransome—? | | |
| | 194 | ii | Ref. to work by, on concrete.... | 176 A | xiv |
| Mispickel in..... | 146 | R c | Ranson, D. J. | | |
| Rensselaerite in..... | 194 | ii | See also Ranson copper mine. | | |
| | 208 | ix | Copper mining by, McMahon tp.. | 100 | xii |
| Ramsays corners. See Ramsayville. | | | Licence to..... | 105 | viii |
| Ramsayville, GLOUCESTER TP., CAR- | | | copper mine, CHESLEY TP., | | |
| LETON CO. | | | ALG. | | |
| Oil near, boring for..... | 18 | x | Notes on, 1901..... | 273 | xi |
| Rand Gold Mining Co. | | | 1902..... | 100 | xii |
| Capital and date of charter..... | 12 | vii | 1903..... | 81 A | xiii |
| Owners of Northern Queen mine. | 124 | vii | Photo of..... | 96, 97 A | xiii |
| Randolph, Edward | 73 | vii | <i>Ranunculus abortivus.</i> | | |
| Farm gold mine, NEAR BAD | | | Abitibi Lake dist..... | 241 A | xiv |
| VERMILION LAKE, R.R.D. | | | Mattagami valley..... | 150 A | xv |
| See also Isabella mine. | | | " <i>affinis.</i> | | |
| Map of..... | 293 | viii | Abitibi Lake dist..... | 241 A | xiv |
| Name of, changed to Isabella.... | 68 | ix | Mattagami valley..... | 151 A | xv |
| Notes on..... | 272 | viii | " <i>aquaticus</i> var. <i>trichophyllus.</i> | | |
| gold mine, NEAR MINE CENTRE, | | | Mattagami valley..... | 151 A | xv |
| R.R.D. | | | " <i>cycnatus.</i> | | |
| Map of..... | 293 | viii | Abitibi Lake dist..... | 241 A | xiv |
| Notes on, 1898..... | 272 | viii | " <i>flammula</i> var. <i>intermedius.</i> | | |
| 1899..... | 68 | ix | Abitibi Lake dist..... | 241 A | xiv |
| 1900..... | 83, 94 | x | " <i>flammula</i> var. <i>reptans.</i> | | |
| Rocks of..... | 65 | v | Abitibi Lake dist..... | 241 A | xiv |
| Gold Mining Co. | | | Mattagami valley..... | 150 A | xv |
| Capital and date of charter..... | 10 | ix | " <i>hispidus.</i> | | |
| Work by, 1898..... | 272 | viii | Abitibi Lake dist..... | 241 A | xiv |
| 1899..... | 68 | ix | Mattagami valley..... | 150 A | xv |
| Ranger, Henry | | | " <i>septentrionalis.</i> | | |
| Creighton mine re-discovered by. | 244 | xii | Abitibi Lake dist..... | 241 A | xiv |
| Evidence by, before R.C. re:— | | | Mattagami valley..... | 150 A | xv |
| claim jumping..... | 309 | R c | Raphilite. See Tremolite. | | |
| copper, Sudbury dist..... | 106 | R c | Rapid City, PENNINGTON CO., S | | |
| gold, Denison tp..... | 113 | R c | DAK. | | |
| iron pyrites, Graham tp..... | 142 | R c | Mining school at..... | 424, 509, 512 | R c |
| technical education..... | 425 | R c | of the drowned, Dog River, | | |
| Gold prospecting by, Vermillion | | | L. SUPERIOR. | | |
| river..... | 153 | x | Minor ref. to..... | 290 A | xiv |
| Jaspilite found by, near L. Wanap- | | | Phyllites on..... | 344 A | xiv |
| itei..... | 177 | x | river, MISSISSAUGI RIVER, ALG. | | |
| Last Chance gold mine discovered | | | Notes on, by Graton..... | 160, 161 | x |
| by..... | 269 | vi | | | |

| | Page. | Vol. | | Page. | Vol. |
|--|-----------|------|--|-----------------------|----------|
| Rapid river, SEVEN ISLANDS BAY, GULF OF ST. LAWRENCE, QUE. | | | Rathbun tp., NIP. | | |
| Iron ore on..... | 346 | RC | Gold mining in..... | 262, 263 57, 84-86 | v vii |
| river, VERMILION RIVER. | | | <i>See also</i> Comstock mine. | | |
| Terraces on..... | 106 c | xiv | Crystal mine. | | |
| Rapsey, William | 227 | i | Mattagamash lake. | | |
| | 239 | ii | Iron ores in, notes by Culbert..... | 224 A | xiii |
| | 203 | iv | Rathburn, R. H. | 143 | x |
| Raspberries. | | | Rathwell—? | | |
| Abitibi dist..... | 182 | viii | Corundum on farm of, N. Burgess | | |
| | 128 A | xiii | tp..... | 214 | vii |
| | 199, 242, | xiv | Albite on farm of..... | 193 | ix |
| Black and Blanche rivers..... | 188, 189 | xii | Rattle, William | | |
| L. Superior, north shore, late | | | Estimate by, of iron producing. | | |
| growth..... | 85 | v | Kingston..... | 336, 337 | RC |
| Michipicoten div..... | 200 A | xv | Evidence by, before R.C. re:— | | |
| Montreal river, L. Superior.... | 200 | viii | iron ore, Darling tp..... | 52, 138 | RC |
| Rasps. | | | smelting of..... | 392, 393 | RC |
| Canadian imports of, 1881-87.... | 250 | RC | ref. to..... | 58 | ii |
| Rat island, L. HURON. | | | Rattledge, R. | | |
| Cambro-Silurian on..... | 86 | i | Brick-making by, Carleton Place. | 29 | xii |
| Quartzite on..... | 72 | i | Rattlesnake creek, GRAND RIVER. | | |
| Portage. See Kenora. | | | Lithographic stone on..... | 146 | xii |
| Portage bay, L. OF THE | | | | 55 B | xiii |
| Woods, R.R.D. | | | falls, RATTLESNAKE CREEK, | | |
| Custom mill on. <i>See</i> L. of the | | | GRAND RIVER. | | |
| Woods Gold and Silver Re- | | | Lower Helderberg formation on. | 53 B | xiii |
| duction Co. | | | Raven. | | |
| Floating island in..... | 109 | vi | Abitibi dist..... | 189 | xii |
| Minor ref. to..... | 13, 14 | iii | | 253 A | xiv |
| Portage Diamond Drill Co. | | | lake, McFADDEN TP., NIP. | | |
| Work by, at Cornucopia mine.... | 67 | viii | Country near, photo of..... | 202 A | xvi |
| Ontario Ltd. mine.... | 68 | viii | lake, VICTORIA CO. | | |
| Regina mine..... | 58 | viii | Cement on. <i>See</i> Raven Lake | | |
| Portage Mfg. and Dev. Co. | | | Portland Cement Co. | | |
| Capital and date of charter..... | 9 | xii | Marl on..... | 32 | xii |
| Portage Reduction Works. | | | | 18 B | xiii |
| <i>See</i> L. of the Woods Gold and | | | | 157 A | xiv |
| Silver Reduction Co. | | | | 18 B | xiii |
| =root bay, RAINY LAKE, R.R.D. | | | Notes on..... | | |
| Conglomerate belt south of..... | 272 A | xiv | Lake Portland Cement Co. | | |
| Rateau. | | | Analyses of clay and marl used | | |
| Oil cited by, in Galicia..... | 93 A | xiv | by..... | 183 A | xiv |
| Rathbone, Edgar P. | | | Capital and date of charter..... | 8 | xii |
| Criticism by, on gold-mining in | | | Directors of..... | 18 B | xiii |
| Ontario..... | 4 | vii | Notes on..... | 32, 33 | xii |
| Rathbun, E. Walter | | | and photos..... | 157-159 A | xiv |
| <i>See also</i> Rathbun & Co. | | | Operating, 1904..... | 18 A | xiii |
| Evidence by, before R. C. re: | | | | 17 A | xv |
| cement..... | 84, 85 | RC | | 20 A | xvi |
| forest-fires..... | 316 | RC | Plant of..... | 17 A | xiii |
| smelting iron ores..... | 341, 393 | RC | | 18 B | xiii |
| Iron prospecting by..... | 133, 136 | RC | Rawdon, MONTCALM CO., QUE. | | |
| On board of Kingston School of | | | Anorthosite in, analysis..... | 100 | v |
| Mines..... | 178 | iii | | 227 | viii |
| President, Canadian Portland | | | tp., HASTINGS CO. | | |
| Cement Co..... | 136 A | xiv | Mispickel in..... | 105 | xi |
| Blast furnace of..... | 88 | RC | Pyralloite in..... | 194 | ii |
| notes..... | 102 | ix | Silver in..... | 205 | xi |
| Cement of, early making..... | 136 A | xiv | Trenton formation in..... | 88 B | xiii |
| plant, Deseronto. | | | Ray, John | 251 | iv |
| burnt..... | 120 B | xv | S. W. | | |
| Napance..... | 109 | i | Copper mining by, Mississagi | | |
| quality..... | 17 | iv | river..... | 148 | viii |
| tests on..... | 77 | RC | Gold mining by, Seine River reg. | | |
| Merged in Canadian Portland | | | | 57, 227, | iv |
| Cement Co..... | 16 | x | Tip-top copper mine owned by.. | 61 A | xv |
| Notes on, 1897..... | 16 | vii | | 61 A | xvi |
| 1899..... | 109 | ix | copper mine. | 140 c | xiv |
| | | | =Wiegand gold mine. See | | |
| | | | Wiegand gold mine. | | |

| | Page. | Vol. | | Page. | Vol. |
|--|---------------|--------|--|---------------|--------|
| Rayburn, J. S. | 57 | vii | Red-paint lake , SEINE RIVER REG., R. R. D. | | |
| Raymond, Dr. R. W. | | | Trail from, to Sawbill lake..... | 10 | vi |
| Notes by, royalties in U.S. | 38-43 | i | | 64 | vii |
| mining properties in | | | -pine lake , NEAR POPLAR | | |
| U.S. | 11 | i | RAPIDS RIVER, ALG. | 124 | A XV |
| mica claim , LOUGHBORO TP., | | | -pine island , RAINY LAKE, R. R. D. | | |
| FRONTENAC CO. | 133 | x | Cactus on, | 96 | ix |
| | 126 | xii | | 51 | v |
| mt., PAINT LAKE , MICHIPICOTEN | | | -pine pt. , IRON LAKE, MICHIPICOTEN DIV., ALG. | | |
| DIV., ALG. | | | Iron formation at, | 313, 317 | A XIV |
| Altitude of, | 282 | A XIV | Siderite from, analysis, | 320 | A XIV |
| Bog iron ore near, | 324 | A XIV | River Expedition (1870). | | |
| Rocks on and near, | 323, 348, 351 | A XIV | Route taken by, | 131 | v |
| Iron formation, | 323 | A XIV | -rock island , L. OF THE WOODS, R. R. D. | | |
| Rayner, E. | 105 | vii | Gold mining on. <i>See</i> Dead Broke mine. | | |
| Rayside. <i>See</i> Azilda. | | | Rock mine , BECKETT, NIP. | | |
| tp., ALG. | | | Notes on, 1905, | 87 | A XV |
| Clay band in, | 105 | C XIV | Rock Silver Mg. Co. | | |
| Nickel eruptive in, | 62 | C XIV | Capital and date of charter, | 30 | A XVI |
| Sandstone ridges in, | 100 | C XIV | silver. | | |
| Reach tp., ONTARIO CO. | | | Composition of, | 453 | R C |
| Marl in, | 122 | A XIV | Sucker creek , ABITIBI RIVER. | | |
| analysis, | 90 | B XIII | Notes on, by Parks, | 184 | viii |
| Reading, BERKS CO., PA. | | | Sucker harbour , N. OF L. SUPERIOR, TH. B. D. | 28 | A XIV |
| Iron industry of, | 117 | ii | Sucker lake , N. OF L. SUPERIOR | | |
| Mining Co. | | | Nepheline-syenite near, | 208 | xi |
| Capital and date of charter, | 24 | A XIII | sulphide of arsenic. <i>See</i> | | |
| Minto gold mine worked by, | 48 | A XV | Realgar. | | |
| | 56 | A XVI | Top clay (UPPER ERIE). | | |
| Realgar (RED SULPHIDE OF ARSENIC). | | | Analyses, notes and photos, | 15-18 | B XV |
| Carrying arsenic, | 101 | xi | Conestogo, analysis, | 104 | B XV |
| Description of, | 221 | vi | For bricks and tiles, description and occurrences. | | |
| Hardness and specific gravity of, | 201 | vi | 56, 59-66, 69-73, 76, 77, 80, 85-105 | B XV | |
| Rehstock gold mine , NEAR FLINTON, ADDINGTON CO. | | | For cement, | 115 | B XV |
| Mispickel in, | 105, 201 | xi | For pottery making, | 118, 119 | B XV |
| <i>Receptaculites.</i> | | | Stratford, photo, | 115 | B XV |
| Sucker creek, near Deseronto, ... | 27 | B XIII | Willow lake , E. OF PORCUPINE LAKE, ALG. | | |
| Reck's fissure stove. | | | Notes on, by Parks, | 176 | viii |
| Diagram of; notes on, | 226, 227 | xii | Reddick, Dr. <i>See</i> next ref. | | |
| Red Cliff bay , L. OF THE WOODS. | | | gold claims , LARDER LAKE, NIP. | | |
| Granite in, | 99 | vi | Gold of, quality, | 208 | A XVI |
| Minor ref. to, | 181 | v | Rocks of, and near, | 207, 208, 211 | A XVI |
| copper ore. <i>See</i> Cuprite. | | | dolomite, photo, | 215 | A XVI |
| fall , OPASATIKA LAKE, ALG. | | | Reddington, J. | 76 | A XV |
| Character of river near, | 136 | A XIII | Redeemer gold mine , VAN HORNE TP. | | |
| hematite. <i>See</i> Hematite. | | | Notes on, 1901, | 244, 245 | xi |
| Hill claim , NET LAKE, TIMAGAMI DIST., NIP. | | | 1903, | 66 | A XIII |
| Notes on, by Coleman, | 173 | ix | 1904, | 49 | A XIV |
| Jacket shaft , CALUMET AND HECLA MINE, | 144 | ix | 1905, idle, | 55 | A XV |
| lake , L. OF THE WOODS REG., R. R. D. | | | 1906, | 59 | A XVI |
| Iron ore on, | 22 | R C | Photos of, | 50 | A XIV |
| lake , MICHIPICOTEN DIV., ALG. | | | Producing, | 1 | A XV |
| Iron range near, | 195 | x | Mining and Milling Co. | | |
| Lake Indian reserve , MINN. | | | Capital and date of charter, | 11 | x |
| Notes on, by Blue, | 166 | v | Redgut bay , RAINY LAKE, R. R. D. | | |
| lead. | | | Gold mining near. <i>See</i> Ontario Gold Concessions. | | |
| Composition of, | 463 | R C | Graphite on, | 86 | viii |
| manganese ore. <i>See</i> Rhodochrosite. | | | Quartz veins on, character, | 59 | iv |
| Moss , HORWICH, LANCASTHIRE. | 196 | i | | | |
| ochre. | | | | | |
| <i>See also</i> Ochre and Limonite. | | | | | |
| Composition of, | 463 | R C | | | |

| | Page. | Vol. | | Page. | Vol. |
|--|---------------|--------|--|--------------------|---------|
| Redgut bay.—<i>Con.</i> | | | Regina gold mine.—<i>Con.</i> | | |
| Rocks on, Keewatin..... | 49, 60 | iv | Minor refs. to | 14, 15 | xii |
| Rocks on, petrography..... | 79, 80 | iv | | 34 | A xiv |
| Surveyed, 1893..... | 40 | iv | Notes on, 1895..... | 180-185 | v |
| village, REDGUT BAY, RAINY LAKE. | | | 1896..... | 6 | Bull. i |
| Rocks near. <i>See</i> Redgut bay. | | | 51-53, 91, 92, 253-255 | | vi |
| Redpoll. | | | 1897..... | 28, 29, 41-43, 114 | vii |
| Abitibi dist..... | 243 | A xiv | 1898..... | 42, 56-59, 277 | viii |
| Redstone (NEMINISEBE) river, | | | 1899..... | 44-46 | ix |
| NIGHT-HAWK LAKE, MINN. | | | 1900 (idle)..... | 73, 91 | x |
| Diabase on | 180 | vi | 1901..... | 80 | xi |
| Dolerites on..... | 116, 117 | A xiii | 1905..... | 57, 58 | A xv |
| Lake shores near, description..... | 175 | viii | Photos of..... | 80, 81 | ix |
| Notes on..... | 176 | viii | | 57 | A xv |
| | 107 | A xiii | Purchased by English Syn. | 227 | iv |
| Soil on, character..... | 132 | A xiii | Re-opening of, expected, 1906.... | 43 | A xvi |
| clay..... | 180 | vi | Rocks of..... | 116 | vi |
| Trees on..... | 124 | A xiii | granite, altered..... | 87 | v |
| Reeb, John | | | notes by Cole- | | |
| Boring by, for gas, Wainfleet tp.. | 131 | i | man..... | 103 | v |
| and Sons. | | | Section of..... | 41 | vii |
| Lime-kilns of, near Port Colborne. | 37 | v | | 15 | ix |
| | 119 | B xiii | Surface work on, 1898..... | 281 | viii |
| Reed, C. | 200 | R C | veins of, character..... | 118 | vi |
| G. | 105 | viii | Gold Mining Co. | | |
| | 118 | ix | <i>See also</i> Regina gold mine. | | |
| | 143 | x | Notes on, by Blue..... | 182 | v |
| | 75 | xi | Officers of..... | 92 | vi |
| | 66 | xii | Reconstruction of, 1896..... | 51 | vi |
| | 19 | A xiii | Sale of, to Black Eagle Gold Mg. | | |
| Peter | 26-29 | A xiv | Co..... | 254 | xi |
| S. R. | 67 | xii | Regnault, Henri Victor | | |
| Susan | 49 | A xiii | Analysis by, of peat and anthra- | | |
| Walter | 200 | R C | cite..... | 166 | vi |
| lake, OLD WOMAN RIVER, MICH- | | | <i>Regulus stryptu.</i> <i>See</i> Kinglet, north- | | |
| IGOTEN DIV. | | | ern-crested | | |
| Rocks on..... | 205 | A xv | Reid, Alfred | 216 | viii |
| Water-lilies on..... | 200 | A xv | G. C. | 72 | xii |
| lake, NORTH OF GRAND PORT- | | | H. | 40, 41 | A xiii |
| AGE, MICHIGOTEN DIV. | | | James. | 9 | vi |
| Rocks on..... | 306, 307, 312 | A xiv | Walter J. | 149 | xii |
| narrows, L. OF THE WOODS, 91, 103 | | vi | | 115 | B xiii |
| Reefton, SOUTH ISLAND, N. Z. | | | Bros. | | |
| Mining school at | 221, 222 | iv | Brick-yard of, Hepworth..... | 59 | B xv |
| Rees and Son, James | 119 | ii | tp., ALG | | |
| Regina bay, L. OF THE WOODS, | | | Rocks in..... | 133 | A xv |
| R. R. D. | | | Soil and timber in..... | 119, 120 | A xv |
| Gold mining on..... | 413 | vii | Reiling, C. J. | 120 | ii |
| <i>See also</i> Regina g. m. | | | Reilly, J. | 105 | vii |
| Notes on..... | 90, 91 | vi | Reindeer Bone. <i>See</i> Atikokan. | | |
| Photo of..... | 160, 161 | v | Reinens, Charles. | 236, 239 | v |
| ref. to | 185 | v | Reis, Heinrich | | |
| Route from, to Pipestone lake, | | | Analysis by, of feldspar, Bedford | | |
| notes..... | 89, 90 | vi | tp..... | 26 | x |
| (CANADA) Gold Mines, Ltd. | | | Reliance gold mine, L. OF THE | | |
| Capital of..... | 10 | viii | WOODS, R. R. D. | | |
| gold mine, REGINA BAY, L. | | | Notes on..... | 40, 41, 74 | x |
| OF THE WOODS. | | | Photo of outcrop..... | 32, 33 | x |
| Accident at..... | 28 | ix | Gold Mining Co. | | |
| Assays of ore from..... | 214 | v | Capital and date of charter..... | 9 | x |
| Controlled by Black Eagle Gold | | | Gold Mining and Milling Co. | | |
| Mg. Co..... | 16, 264 | xi | Operating Independence mine.... | 66 | A xiii |
| Depth of, 1899..... | 35 | ix | Renaud, Edward Thomas. | 174 | ii |
| Exhibit from, at Buffalo..... | 85 | xi | Rendezvous pt., LONG BAY, L. OF | | |
| Map of (sketch)..... | 180 | v | THE WOODS, R. R. D. | | |
| Mill at, photo..... | 160, 161 | v | Asbestos near | 195 | ix |
| reconstructed | 21, 277 | viii | Minor ref. to..... | 181 | v |

| | Page. | Vol. | | Page. | Vol. |
|--|---------------|----------|--|----------|--------|
| Renfrew, HORTON TP., RENFREW CO. | | | Reynolds, Prof. Joseph | | |
| Brick-yards at, notes..... | 96, 97 | B XV | Abitibi soils determined by..... | 130 | A xiii |
| analysis of clay used in..... | 15, 18 | B XV | Acknowledgments to..... | 239 | A xiv |
| Lime industry of, notes..... | 105, 106 | B xiii | Chart by, illustrating quality of | | |
| Limestone near, for Sudbury | | | Mattagami soils..... | 155 | A XV |
| smelter..... | 2, 13 | B xiii | Minor ref. to..... | 44 | A XV |
| marble | | | S. H..... | 47, 60 | IX |
| quarries..... | 74 | R C | 76 | | X |
| 102, 103 | B xiii | | William V..... | 29 | iv |
| for monu- | | | C. T. and Co..... | 122 | xi |
| ments..... | 11 | B xiii | copper claim, WHISKEY LAKE, | | |
| notes by | | | ALG. | | |
| Merritt..... | 76 | R C | Notes on, 1904..... | 67 | A xiv |
| Mining class at..... | 197 | vi | Reynoldsville, JEFFERSON CO., PA. | | |
| Brick and Tile Mfg. Co. | | | Coal of..... | 201, 202 | i |
| Capital and date of charter..... | 30 | A xvi | calorific power..... | 207 | ii |
| co. | | | for Ottawa Carbide Co..... | 21 | x |
| Apatite deposits in..... | 436, 439, 440 | R C | <i>Rhamnus alnifolia</i> . | | |
| Brick-yards in, notes..... | 96, 97 | B XV | Mattagami valley..... | 151 | A XV |
| Corundum in..... | 207-230 | vii | <i>Rhipidomella livia</i> . | | |
| 205, 222-224 | viii | | Kwataboahagan river..... | 186 | A xiii |
| 21, 82, 84 | A xvi | | Port Colborne, near..... | 35 | xi |
| map showing..... | 82 | A xvi | St. Marys, near..... | 151 | xii |
| Limestone in, notes by Miller..... | 101-107 | B xiii | 96 | B xiii | |
| Marl in, occurrences..... | 121 | A xiv | " <i>pendlope</i> . | | |
| Molybdenite from, shown at | | | Stony pt., L. Huron..... | 155 | xii |
| Chicago..... | 187 | ii | Thedford..... | 154 | xii |
| Pargasite from..... | 194 | ii | " <i>ramuensis</i> . | | |
| Topography of, character..... | 437 | R C | Stony pt., L. Huron..... | 155 | xii |
| <i>Rensselaeria ovata</i> . | | | Thedford..... | 154 | xii |
| Abitibi river..... | 187 | viii | Rhode island, F. S. | | |
| Rensselaerite or Pyralloolite. | | | Anthracite in..... | 159, 163 | vi |
| Charleston lake, analysis..... | 208 | ix | notes by Tarr..... | 165 | vi |
| Ramsay tp..... | 194 | ii | Rhodes, Harry | 38 | A xiv |
| 208 | ix | | William..... | 147 | R C |
| Rawdon tp..... | 194 | ii | 21 | ii | |
| Republic dist., MICHIGAN. | | | <i>Rhumaria rumosa</i> . | | |
| Iron ores of..... | 20 | R C | Stony pt., L. Huron..... | 155 | xii |
| Iron Works. | 130 | ii | Rhodium. See <i>Sperrylite</i> . | | |
| Reserve island, SEINE RIVER, R.R.D. | | | Rhodin, J. G. A. | | |
| Gold mining on, 1896..... | 4 | Bull. ii | Electrolytic apparatus of, descrip- | | |
| 74, 75 | vi | | tion and diagram..... | 65-68 | x |
| 1897..... | 132, 133 | vii | Rhodochrosite (MANGANESE SPAL). | | |
| 1898..... | 94 | viii | Hardness of..... | 202 | vi |
| Reservoir park, TORONTO. | | | Lake Superior islands..... | 208 | ix |
| Fossils from..... | 230 | A xiii | McKellar island..... | 187 | ii |
| Resseman, P. W. | 86 | ix | Silver islet..... | 54 | B xiv |
| Rest island, RAINY LAKE, R.R.D. | | | Notes on, by Goodwin..... | 216 | vi |
| Quartz-diorite on..... | 78 | iv | Port Arthur silver dist..... | 58 | B xiv |
| Reusch, H. | | | Prospecting for, hints on..... | 462 | R C |
| Views of, re origin of Norwegian | | | Specific gravity of..... | 202 | vi |
| apatite..... | 443 | R C | Rhubarb. | | |
| Revell, George | 71 | A xiv | Grown at Fort Matachewan..... | 240 | A xiv |
| William..... | 216 | viii | <i>Rhynchonella cuneata</i> . | | |
| Reverberatory furnace. | | | Abitibi river..... | 187 | viii |
| Comparison of, with blast furnace..... | 375 | R C | Thorold..... | 117 | B xiii |
| Revillon Freres. | 106 | A xvi | " <i>psittacea</i> . | | |
| Reward claims. | | | James bay..... | 143 | A xiii |
| West Australia..... | 295 | R C | Rhyolite. | | |
| Reynolds, Charles C. | | | Composition of..... | 234 | vi |
| Mining by, Michipicoten div..... | 105 | vii | Riazan prov., RUSSIA. | | |
| 105 | viii | | Peat in..... | 217, 218 | ii |
| <i>See also</i> Reynolds | | | Rib lake, TIMAGAMI DIST., NIP. | | |
| copper claim. | | | Minor ref. to..... | 35 | B xiv |
| Dr. | | | Pyrites mining on..... | 21, 200 | A xvi |
| Views of, re peat as furnace fuel..... | 209 | i | photos..... | 166 | A xvi |
| | | | <i>See also</i> Harris mine. | | |
| | | | <i>Ribes cynosbati</i> . | | |
| | | | Abitibi Lake dist..... | 241 | A xiv |

| | Page. | Vol. | | Page. | Vol. |
|--|----------|--------|---|--------------|--------|
| <i>Ribes doridum</i> . | | | Richardson, George—<i>Con.</i> | | |
| Abitibi Lake dist. | 241 | A xiv | Feldspar mining by, Bedford tp. | 26 | x |
| " <i>prostratum</i> . | | | | 295 | xi |
| Abitibi Lake dist. | 241 | A xiv | <i>See also</i> Kingston Feldspar and | | |
| " <i>rubrum</i> . | | | Mg. Co. | | |
| Abitibi Lake dist. | 241 | A xiv | Richardson corundum | | |
| Rice. | | | mine. | | |
| Matawin valley. | 129 | v | J. (MICHIGOTEN) | 105 | vii |
| Moss tp. | 120 | v | J. (TILBURY E. TP.) | 98 | A xvi |
| Rainy River dist. | 96, 97 | iv | James | | |
| Grassy lake. | 60 | v | Peat bogs sounded by, Carleton | | |
| Little Wahigoon lake. | 67 | iv | co. | 198 | ii |
| Rice lake. | 148 | v | John <i>See</i> Richardson gold | | |
| A. N. | 46, 82 | viii | mine. | | |
| | 76 | ix | Sir John | | |
| bay, NICKEL LAKE. | | | On meaning of Kaministiquia .. | 198 | v |
| Pyrites near. | 175 | A xvi | Matthew | | |
| bay, RAINY LAKE, R. R. D. | | | Boring by, for oil, Port Colborne. | 129 | i |
| Gold mining near. | 55 | iv | Robert | 31 | viii |
| Rocks on. | 81 | iv | W. | 105 | vii |
| creek, STURGEON LAKE, R. R. | | | James and Sons. | | |
| AND TH. B. D'S. | 147 | xi | Brick-yard of, Kerwood | 79 | B xv |
| KANAGUSHIKA OR ITCHI lake, | | | Exhibits of, at Buffalo | 88, 90 | xi |
| MATTAGAMI RIVER, ALG. | | | Feldspar mining by <i>See</i> Rich- | | |
| Description of. | 131 | ix | ardson feldspar mine. | | |
| Forest fires near. | 141 | ix | Mica mining by, Loughboro tp. | 12, 92 | A xiii |
| lake, SEINE RIVER, R. R. D. | | | | 20, 85 | A xiv |
| Rice on, wild. | 148 | v | | 103 | A xv |
| lake, S. OF WAHIGOON LAKE, | | | | 23 | A xvi |
| R. R. D. | | | Mining classes at mines of | 39 | A xv |
| Gold mining on, 1900. | 97 | x | Zinc mining by | 25 | xii |
| 1901. | 133 | xi | | 11, 54 | A xiii |
| <i>See also</i> Elizabeth mine | | | <i>See also</i> Richardson zinc mine. | | |
| lake, NORTHUMBERLAND AND | | | corundum mine, BEDFORD TP., | | |
| D. CHAM COS. | | | FRONTENAC CO. | | |
| Beach near. | 232 | A xiii | Notes on. | 39, 295 | xi |
| Morainic hills near. | 233 | A xiii | | 38, 136, 137 | xii |
| "Rice rock." | | | | 21, 90 | A xiii |
| Definition of. | 8 | c xiv | | 19 | A xiv |
| Sudbury, near. | 89 | c xiv | and photos of workings. | | |
| Rich, William | | | | 99, 100 | A xv |
| Notes by, on royalties in Corn- | | | feldspar mine, BEDFORD TP., | | |
| wall, Eng. | 32, 33 | i | FRONTENAC CO. | | |
| cape, OWEN SOUND. | | | Accident at. | 33-35 | A xv |
| Beaches at, notes by Coleman. | 176 | ix | Mining class at. | 39-41 | A xv |
| Richard landing, ST. JOSEPH ISLAND, | | | Notes on, 1903. | 90 | A xiii |
| L. HUKON. | 199 | xi | 1904. | 81 | A xiv |
| Richardes, R. | 27, 28 | A xv | 1906. | 85 | A xvi |
| Richards, Prof. Joseph W. | | | Photo of. | 224, 225 | A xiii |
| Views of, on aluminium. | 173, 174 | i | | 81, 82 | A xiv |
| | 247 | viii | | 85 | A xvi |
| Prof. R. H. | | | Producing, 1905. | 19 | A xiii |
| Assay by, of quartz, Marmora tp. | 107 | R c | gold mine, MADOC TP., HAST- | | |
| Notes by, on American and other | | | INGS CO. | | |
| mining-schools. | 509-513 | R c | Discovery of. | 27, 28 | R c |
| Notes by, on laboratories in U.S. | 417 | R c | | 35 | iv |
| S. | | | | 139 | xi |
| Notes by, on Murray mine. | 187 | iii | Evidence <i>re</i> , before R. C. | 110, 111 | R c |
| | 52 | c xiv | History of. | 53-55 | iii |
| Hon. Stephen | | | Idle, 1894. | 236 | iv |
| Windsor | | | Notes on, by Merritt. | 106 | R c |
| Notes by, on iron industry, 1892. | | | Vennor. | 39 | iv |
| | 121, 122 | ii | Ore of, character. | 38 | iv |
| Richardson, E. | 435 | R c | harbour, HOMER TP., L. SE- | | |
| George | | | PERIOR. | | |
| Evidence by, before R. C. <i>re</i> cap- | | | Rocks near. | 305, 349 | A xiv |
| title. | 53 | R c | Hill gold mine, ADJOINING | | |
| | | | RICHARDSON GOLD MINE. | 111 | R c |

| | Page. | Vol. | | Page. | Vol. |
|--|-----------|--------|--|------------|--------|
| Richardson zinc mine, OLDEN TP., FRONTENAC CO. | | | Ries, Heinrich | | |
| Cobbling ore at, photo..... | 112, 113 | A xiii | Notes by, on plasticity of clays..... | 34 B | xv |
| Mining class at | 54 | A xiii | Ref. to work by, on Lime Industries of New York..... | 2 B | xiii |
| Mill at, photo | 93 | A xv | Rigaud (GRAISSE) river, PRESCOTT CO. | | |
| Notes on, 1902..... | 139 | xii | Limestone on, Calciferous..... | 17 B | xiii |
| 1903..... | 94 | A xiii | quarried..... | 98, 99 B | xiii |
| 1904..... | 39, 79 | A xiv | "Rigging" for oil. | | |
| 1906..... | 79 | A xvi | Dawn tp..... | 18, 19 | xvii |
| Operating, 1903..... | 11 | A xiii | Riggs, M. G. | 78 | A xiii |
| Output, 1904..... | 15 | A xiv | Right of Way Mfg. Co. | | |
| 1906..... | 18 | A xvi | Capital and date of charter..... | 30 | A xvi |
| Photo of..... | 80 | A xiv | Dividend, 1907..... | 13 | A xvi |
| Richelieu river, ST. LAWRENCE RIVER, QUE. | | | Producing, 1906..... | 8 | A xvi |
| Clays on, stratified..... | 32 B | xv | Riley, James | | |
| Richmond, GOULBURN TP., CARLETON CO. | | | Experiments by, on nickel-steel..... | 383, 384 | R C |
| Peat bog near | 190 | i | 135, 139-141..... | ii | |
| tp., LENNOX CO. | | | 193, 194..... | iv | |
| Black River formation in..... | 27 B | xiii | 170 C | xiv | |
| Rickard, Alexander | 242 | viii | Manager, Steel Works of Scotland | 173, 176 C | xiv |
| C. M. | 109 | iii | Notes by, on uses of nickel-steel..... | 386 | R C |
| T. A. | | | Photo of..... | 277 C | xiv |
| Paper by, on mineral eposits of Chalanches, France..... | 63-67 B | xiv | Ref. to paper by, on Alloys of Nickel and Iron..... | 165 C | xiv |
| Views of, on diamond drilling... tp., Nip. | 164 | iii | Statement by, re value of nickel-steel..... | 185 | iv |
| Abitibi river in, character | 186 | A xiv | Steel ships first built by | 368 | R C |
| Sand in, for building material... Soil from, analysis .. | 216, 247 | A xiv | Ringerike, NORWAY. | | |
| peat..... | 201 | A xiv | Nickel ore of, analysis..... | 283 | xii |
| Trees in..... | 232 | A xiv | of matte..... | 154 C | xiv |
| Ricketts, P. de P. See next ref and Banks. | | | mining | 178, 179 | iv |
| Analysis by, of iron ore, Darling tp..... | 141 | R C | Rintoul, John Alfred | 53-57 | xi |
| Notes by, on MacDonell mine, Sudbury | 179 | ii | Rio Myra Co. | | |
| Report by, on Belmont gold mine | 49, 50 | iii | Working pyrites, Madoc tp..... | 295 | xi |
| Riddell ? | 49 | A xvi | Tinto copper mine, SPAIN. | | |
| J. D. | 82 | ii | Notes on..... | 371, 372 | R C |
| Riddle, David | 31 | viii | by Tupper..... | 178 C | xiv |
| Rideau canal. | | | Pyrites deposits of..... | 196 | A xvi |
| Fossil tracks on..... | 40 | R C | Rocks of..... | 192 | A xvi |
| Graphite on. See MacCue. | | | Riopelle, Joseph | | |
| Iron ores on, notes..... | 34, 35 | ii | Notes by, on nickel in Denison tp..... | 105 | R C |
| Graphite Co. | | | Riot Act. | | |
| Capital and date of charter..... | 9 | xii | Read at Silver islet..... | 150 | vi |
| lake, RIDEAU CANAL. | | | Rioux, Paul | 173, 174 | iii |
| Apatite mining near | 251 | ii | 236, 239..... | v | |
| See also Otter apatite mines. | | | Ripley, J. L. | 100 | xii |
| Steatite on island in | 210 | ix | J. O. | 67 | xii |
| Ridgetown, HOWARD TP., KENT CO. | | | L. V. | 49 | A xiii |
| Brick-yard at, notes..... | 72 B | xv | M. T. | 164 | xii |
| Ridgeway, BERTIE TP., WELLAND CO. | | | 49 | A xiii | |
| See also Bertie tp. | | | 95 | A xiii | |
| Natural gas supply of..... | 135 | i | 78 | A xiv | |
| 44..... | xi | | 94 | A xv | |
| Ridler Brick Co. | | | 158 | A xvi | |
| Brickyard of, Penetanguishene, notes | 99, 100 B | xv | Sun copper mine, MORAN TP., ALG. | | |
| Ridley, George N. | 20 | ii | Notes on, 1903..... | 79, 80 | A xiii |
| Ridout, H. | 252 | xi | Ritchie, C. E. | 107 | A xv |
| 94..... | xii | | Samuel J. | | |
| 59 | A xv | | Letter to, re Sudbury mining costs | 180 C | xiv |
| | | | Magnetic concentration of iron ores tried by, Hastings co..... | 332 | xii |
| | | | Notes by, on the Iron Industry of Ont | 106-111 | ii |

| | Page. | Vol. | | Page. | Vol. |
|--|---------------|--------|--|--------------|--------|
| Ritchie, Samuel J. — <i>Con.</i> | | | Robb, John | | |
| Paper by, on nickel-steel.... | 168-182 | c xiv | Notes by, on graphite works, | | |
| Photo of | 167 | c xiv | MacCue | 35 | vi |
| W. S. | 180, 196 | viii | Robbins, David. | 92 | vii |
| Ritter and Conley. | 118 | ii | George L. | 46, 81 | viii |
| Rittingerite. | | | K. S. | 105 | A xiv |
| Joachimsthal, Bohemia..... | 61 | B xiv | Robbins, TEXAS. | | |
| River Range, ZONE TP., KENT CO. | | | Paving clay from, analysis..... | 120 | iii |
| Boring at, for oil..... | 21 | vi | Robert bay, MUSKOKA DIST. | 80 | B xiii |
| Riviere a la Graise. <i>See</i> Rigaud | | | cape, MANTOULIN ISLAND, ALG. | | |
| river. | | | Rocks at | 78 | B xiii |
| aux Sables. <i>See</i> Ausable | | | Section of strata at..... | 77 | B xiii |
| river. | | | Roberts, Prof. Chandler. | 493 | R c |
| du Loup, TEMISCOUATA CO., | | | H. | 214 | v |
| QUE. | | | I. S. | 240 | ii |
| Marine deposits at | 216 | x | John H. | 135 | x |
| Ouelle, KAMAROUSKA CO., QUE. | | | | 288 | xi |
| Peat at | 198 | ii | | 103 | A xv |
| Riverside portage, MISSINAIBI | | | M. S. | | |
| RIVER, ALG. | 194 | viii | Peat-drying invention of..... | 197 | i |
| | 145, 178 | A xiii | T. | 232 | xi |
| Rivets. | | | Frank C. & Co. | 17 | A xvi |
| Canadian imports of, 1881-87.... | 246, 249, 250 | R c | Iron Co. | | |
| Factories for, statistics | 116 | ii | Capital and date of charter..... | 12 | vii |
| Rivdorfer Maschinenfabrik. | | | iron mine, PALMERSTON TP., | | |
| Peat process of. <i>See</i> Schliekey- | | | FRONTENAC CO. | | |
| sen, C. | | | Notes on | 81 | ii |
| RL 403 silver loc. <i>See</i> O'Brien mine. | | | tp., NIP. | | |
| 404, 406 silver locs. <i>See</i> Nip- | | | Iron prospecting in..... | 219 | A xiii |
| issing Mining Co. | | | ore in, notes by Culbert | 223 | A xiii |
| RM 5 gold loc. <i>See</i> Golden Fissure | | | Roberts=Austen, Sir William | | |
| mine. | | | Chandler | | |
| Roads. | | | Notes by, on extraction of nickel. | 132-134 | ii |
| Baril portage to Moss tp. (Govt.) | 121 | v | | | |
| Bruce Mines to Ophir mine..... | 38 | iii | Notes by, on Thomas-Gilchrist | | |
| Dawson route, R. R. d. and Th. | | | steel process..... | 91, 92 | ii |
| B d., notes by Blue | 115 | v | Paper by, on nickel extraction by | | |
| England, superiority of. | 103 | iii | Mond process | 106-120 | viii |
| For mining industry, need of, 239-241 | | R c | Visit of, to Canada..... | 144, 145 | vii |
| Govt. contributions to | 9, 10 | vi | | 7 | viii |
| | 34 | vii | Robertson, A. M. | 65, 156, 157 | v |
| Materials for— | | | | 112 | vii |
| cement, as foundation | 16 | iv | A. W. | 273 | viii |
| dialase, Bruce Mines..... | 125, 169 | viii | | 70 | ix |
| notes by Coleman..... | 126 | viii | D. | | |
| Troquois beach | 238 | A xiii | Burgess gas well tested by | 99 | A xvi |
| quality | 104, 105 | iii | David | 97 | x |
| trap, notes by Blue | 13-16 | v | Duncan <i>See</i> next ref. | | |
| <i>See also</i> Brick, vitrified | | | D. & Co. | | |
| Michipicoten div..... | 5 Bull. iii | | Brown stone quarrying by, Credit | | |
| | 288, 289 | A xiv | Forks | 110 | ix |
| | 175 | A xv | Line kilns of | 28 | xii |
| Mine Centre to Vermilion lake | | | analysis and capacity..... | 58 | B xiii |
| (Govt.) | 155 | v | photo..... | 16, 17 | B xiii |
| Northern nickel range..... | 192, 193 | A xiii | Robertsville (or Lizzie) iron mine, | | |
| Roaf, J. R. | 143 | x | PALMERSTON TP., FRONTENAC CO. | | |
| Roam lake, W. of ROBERTS TP., ALG. | | | Notes on, 1898..... | 31 | viii |
| 552 Notes on, by Culbert..... | 223 | A xiii | 1899..... | 194 | ix |
| Roasting ores. | | | 1900..... | 128 | x |
| Sudbury dist., method | 379, 401 | R c | Ore from, at World's Fair. | 81 | ii |
| Rob Roy Mines, Ltd. | | | Seapolite rock in | 229 | viii |
| Capital and date of charter | 11 | xi | Robillard, Annie. | 243 | viii |
| Robb, Charles | | | Henry | | |
| Altitude of Burlington beach | | | Corundum on land of, Raglan tp. | 243 | viii |
| given by | 225 | A xiii | | 20 | ix |
| G. C. | | | | 130 | x |
| Views of, on mica boiler-covering. | 32 | v | photo | 232, 233 | viii |
| | | | <i>See also</i> Craig mine | | |

| | Page | Vol. |
|--|----------|--------|
| Robillard, H. & Sons. | | |
| Limestone quarry of | 28 | xii |
| analysis and position | 37, 38 | B xiii |
| Robin. | | |
| Abitibi dist. | 126 | A xiii |
| swamp | | |
| Timagami Lake dist. | 58 | R C |
| Robinet, J. | | |
| Brick-yard of, Sandwich. | 64 | B xv |
| Robinson, A. H. A. | | |
| Analysis by, of:— | | |
| heronite | 189 | ix |
| iron ore, Helen mine | 193 | x |
| limestone, Port Colborne | 34 | xi |
| syenite, N. shore, L. Superior. | 211 | xi |
| A. W. | 99 | vii |
| B. J. | 209 | x |
| David | 102 | i |
| E. | 87, 88 | vii |
| Edmund A. | 174 | v |
| George | 46, 48 | xii |
| George W. | 200 | R C |
| H. M. | 105 | viii |
| James | 238 | v |
| O. B. | 84 | viii |
| | 66 | ix |
| | 82, 94 | x |
| William | | |
| Accident to | 31 | vii |
| William | | |
| Gas on farm of, E. Tilbury tp. | 97-100 | A xvi |
| Hon. William | 178 | ii |
| William Cherry | | |
| Notes by, on turf industry in the | | |
| Netherlands | 216 | ii |
| lake, SEINE RIVER DIST., R.R. D | 128 | vii |
| lake, YORK BRANCH RIVER. | | |
| Syenite on | 221 | viii |
| Rea Machine Co. | 119 | ii |
| Robison, J. B. J. | 39 | vi |
| Roche, E. K. | | |
| Work by, 1900. | 6 | x |
| 1901 | 60 | xi |
| 1903 | 42 | A xiii |
| 1906 | 31 | A xvi |
| W. W. | | |
| Notes by on boring for:— | | |
| anthaxolite, Balfour tp. | 160 | vi |
| iron, Matawin range. | 131 | v |
| Work by, 1895. | 190, 226 | v |
| 1903. | 42 | A xiii |
| Fendue channel, OTTAWA | | |
| RIVER, QUE. | | |
| Limestone in. | 102, 104 | B xiii |
| Roche moutonnees. | | |
| Michipicoten harbour, photo. | 177 | A xv |
| Night-hawk lake. | 115 | A xiii |
| Rochester, CLINTON CO., N.Y. | | |
| Brick pavements in | 108 | iii |
| Iron ore near. | 43 | R C |
| Morainic ridges round | 123 | ix |
| Rochester-Colbalt Mines, Ltd. | | |
| Capital and date of charter. | 30 | A xvi |
| Rochester Mining Co. | | |
| Capital and date of charter | 29 | A xvi |
| tp., Essex co. | | |
| Boring in, for oil. <i>See</i> Woodslee. | | |
| Rochon. <i>See</i> Lillin and Rochon. | | |

| | Page | Vol. |
|--|--------------------|--------|
| Rock Glen, AUSABLE RIVER, LAMB- | | |
| TON CO. | | |
| Hamilton formation on. | 154, 155 | xii |
| | 69 | B xiii |
| Shale on, for pottery | 156 | xii |
| analysis | 70 | B xiii |
| Island bay, RAINY LAKE. <i>See</i> | | |
| Rocky Islet bay. | | |
| Island portage, MISSISSAUBI | | |
| RIVER, ALG. | 195 | viii |
| lake, ABERDEEN AND PLUMMER | | |
| TPS., ALG. | | |
| Copper on, chalcopryite. | 196 | ix |
| mining | 19 | viii |
| | 22, 271, 272 | xi |
| <i>See also</i> Rock Lake copper | | |
| mine. | | |
| Railway from, to Bruce Mines. | 37 | x |
| Rock near. | 259 | viii |
| lake, FRONTENAC AND LANARK | | |
| CO. | | |
| Corundum-bearing rocks near. | 227 | viii |
| Limestone on. | 46 | ii |
| Lake apatite mine. <i>See</i> Opin- | | |
| con apatite mine. | | |
| Lake copper mine, ABERDEEN | | |
| AND PLUMMER TPS., ALG. | | |
| Mining class at. | 61 | xii |
| Minor ref. to. | 7 | A xiii |
| Notes on, 1889. | 95, 96 | ix |
| 1900. | 119, 120 | x |
| 1901. | 270, 271 | xi |
| 1902. | 99 | xii |
| by Coleman | 124 | viii |
| Photos of. | 95, 96 | ix |
| | 144, 145 | x |
| | 256, 257, 272, 273 | xi |
| plant. | 128, 129 | x |
| | 96, 97 | xii |
| Work at, 1898. | 19 | viii |
| 1899. | 95 | ix |
| 1900. | 37, 118, 119 | x |
| 1901. | 270 | xi |
| 1902. | 18 | xii |
| 1903, suspended | 81 | A xiii |
| <i>See also</i> next ref. | | |
| Lake Mining Co. | | |
| Capital and date of charter | 10 | ix |
| Exhibit of, at Buffalo | 86 | xi |
| Work by. <i>See</i> Rock Lake cop- | | |
| per mine. | | |
| salt. <i>See</i> Salt. | | |
| Rockford, TOWNSEND TP., NORFOLK | | |
| CO. | | |
| Clay near. | 33 | B xiii |
| Limestone at, fossils in. | 88 | B xiii |
| corals. | 113 | xii |
| Rockland, CLARENCE TP., RUSSELL | | |
| CO. | | |
| Lime from, for Ottawa Carbide | | |
| Co. | 21 | x |
| Rockland, KNOX CO., MO. | | |
| Limestone at, cost of, placed in | | |
| kilns | 10 | B xiii |
| Quarry cable hoist at. | 353 | R C |
| Rockland, QUE. <i>See</i> New Rockland. | | |
| Rocks. | | |
| Division of. | 133 | iii |
| Notes on minerals forming | 223-226 | vi |

| | Page. | Vol. | | Page. | Vol. |
|---|------------|------|---|------------|------|
| Rocks and Rock structures. | | | Rollin. | | |
| Paper on, by Miller..... | 229-236 | vi | Brick-yard of, Madoc..... | 18 B | xv |
| Rockwood, ERAMOSA TP., WELLINGTON CO. | | | hill, NAPANEE. | | |
| Lime-kilns at..... | 14 A | xiii | Analysis of limestone from..... | 28 B | xiii |
| photo..... | 122 B | xiii | Rolling mills. | | |
| Limestone at, notes..... | 16 B | xiii | Ontario, notes by Hardy..... | 353 | R C |
| Limestone at, notes..... | 120, 122 B | xiii | Rollins mine, WOLLASTON TP., HASTINGS CO. | | |
| Rocky Islet bay, WALTON TP., R. R. D. | | | Mispickel in..... | 104, 198 | xi |
| Gneiss on..... | 79 | iv | Roman cement. | | |
| Porphyrite near..... | 84 | iv | Manufacture of, in England..... | 118 A | xiv |
| Tale at, for Indian pipes..... | 85 | iv | Romania. See Roumania. | | |
| lake, NEAR WINDIGOKAN LAKE, TH. B. D. See Watson lake. | | | Romans, The | | |
| pt., MANITOULIN ISLAND, ALG. | | | Spanish copper mines worked by..... | 372 | R C |
| Niagara formation at..... | 78 B | xiii | Rome, ONEIDA TP., N. Y. | | |
| Saugeen river, SAUGEEN RIVER. | | | Beaches near..... | 233, 236 A | xiii |
| Guelph formation on..... | 50 B | xiii | Change of level north of..... | 235 A | xiii |
| Waterpower on..... | 33 | xi | Romeu, A. de..... | 55 B | xiv |
| Roddick tp., R. R. D..... | 164, 167 | v | Rominger, Dr. Charles | | |
| Rode, J..... | 82 | vi | Note by, re Helderberg formation in Michigan..... | 123 | xi |
| Rodgers, S. B. | | | Romney tp., KENT CO. | | |
| Puddling furnace of..... | 359 | R C | Oil and gas in..... | 25, 26 A | xiii |
| Roebing concrete system. | | | map showing wells..... | 25 A | xvi |
| Description of..... | 177 A | xiv | report by Knight..... | 92-106 A | xvi |
| Roehling—? | 79, 80 B | xiv | ref. to..... | 23, 24 A | xvi |
| Roessler & Hasslacher Chemical Co. | 122 | xi | See also Wheatley. | | |
| Rogers, Elias..... | 201 | i | Rondeau, HARWICH TP., KENT CO. | | |
| F. C. | | | Natural gas near..... | 127 | i |
| Notes by, on salt in Ontario..... | 188 | R C | Peat bog at, analysis..... | 203 | xii |
| G. H. | | | idle, 1903..... | 29 A | xiii |
| ..... | 105 | vii | notes..... | 32 A | xiii |
| ..... | 105 | viii | and plan of works..... | 206-208 | xii |
| ..... | 118 | ix | photo..... | 192, 193 | xii |
| ..... | 143 | x | Portage and Chemung formation | | |
| ..... | 75 | xi | near..... | 47 | R C |
| ..... | 67 | xii | harbour, L. ERIE. | | |
| ..... | 49 A | xiii | Peat and gas on. See Rondeau. | | |
| J. M. | | | Roofing materials. | | |
| Mica mining by, N. Burgess tp..... | 130 | xii | See also Actinolite, Slate, etc. | | |
| J. W. | 118 | ix | Evidence re, before Roy. Com. 79-88 | | R C |
| Prof. | | | slate. See Slate for roofing. | | |
| Phosphatic secretions found by, | | | "Roolz." | | |
| on sea-bottoms..... | 441 | R C | Manufacture of..... | 160 | ii |
| R. | 57 | ix | Root river, S. S. MARIE DIST., ALG. | | |
| ..... | 79 | x | Copper mining on..... | 72 A | xvi |
| Samuel See Fairbanks, | | | Rocks near..... | 273, 274 A | xiv |
| Rogers Co., and Rogers, | | | Ropes, Leverett S..... | 20 | ix |
| S. and Co. |  |  | ..... | 130 | x |
| W. C. | | | Rosa blanda. | | |
| Work by, 1897..... | 208 | vii | Abitibi dist..... | 241 A | xiv |
| 1898..... | 204 | viii | Mattagami valley..... | 150 A | xv |
| S. and Co. | 162 | R C | Moose River basin..... | 177 A | xiii |
| ..... | 27 | v | " sagit. | | |
| Rohn, E. H..... | 105 | viii | Mattagami valley..... | 150 A | xv |
| Roland, Walpole | | | Roscoe, Prof. Henry Enfield..... | 491 | R C |
| Evidence by, before R. C. re:— | | | Rose, Gustav | | |
| L. Superior region..... | 62 | R C | Miaskite named by..... | 213 | vii |
| silver, Strange tp..... | 202 | R C | Rose (WILD). | | |
| surveys in mineral belts..... | 313 | R C | Abitibi dist..... | 253 A | xiv |
| Minor ref. to..... | 160 | v | Sturgeon river..... | 139 A | xvi |
| Notes by, on silver lodes, Port | | | pt., GEORGIAN BAY, L. HURON. | | |
| Arthur dist..... | 225, 226 | i | Rocks at..... | 166 | ix |
| lake, BOWELL TP., ALG. | | | petrography..... | 181 | ix |
| Rocks on..... | 200 A | xiii | Striae at, direction..... | 178 | ix |
| ..... | 70 C | xiv | Roseberry tp., R. R. D..... | 167 | v |
| Rolla, PHELPS CO., MISS. | | | Rosebrugh, R. M. | | |
| Mining school at..... | 509, 511 | R C | Analysis by, porphyritic granite..... | 122 | vi |

| | Page. | Vol. | | Page. | Vol. |
|---|----------|-----------|---|---------|--------|
| Rosebrugh, T. R. | 215 | i | Ross tp. <i>Con.</i> | | |
| Rosebush, Louis | 14 | ii | Molybdenum sulphide | 232 | vii |
| Rosedale, FENELON TPL., VICTORIA |  |  | ..... | 191 | ii |
| co. |  |  | ..... | 205 | ix |
| Brick works near | 105 | i | Picrolite in | 207 | ix |
| <i>See also</i> Don river. | | | Spinel in | 210 | ix |
| Pressed Brick and Terra | | | Tourmaline in | 190 | ii |
| Cotta Co. |  |  | ..... | 211 | ix |
| Paving-brick making contemp- | | | Tremolite in | 211 | ix |
| lated by | 127 | iii | Rossi, Auguste J. | | |
| Roselite. | | | Experiments by, on titanite ores, 89-91 | | ii |
| Saxony | 90 | B xiv | Notes by, on titanite ores | 231 | vii |
| Rosendale, ULSTER CO., N.Y. | | | Rossie, N.Y. | | |
| Limestone of, analysis | 34 | xi | Hearthstone of, for furnaces | 324 | R C |
| ..... | 15, 16 | B xiii | Rossland, R.R.D. | | |
| comparison with some in east- | | | Fahlbands near | 118 | vi |
| ern Ont. | 153 | xii | Gold mining near | 234 | ii |
| Rosenheim, BAVARIA. |  |  | ..... | 30, 31 | iii |
| Peat drying process at | 193 | i | ..... | 69, 227 | iv |
| Ross, George J. | 51, 52 | ix | <i>See also</i> El Diver m. | | |
| Hon. George W. | 88 | xi | Rajah m. | | |
| J. | 84 | xii | Molybdenite near | 14 | iii |
| Hon. J. S. | 147 | R C | Road to, built by Govt. | 31 | vii |
| O. C. D. | | | Rossman, J. P. | 74 | ix |
| Notes by, on origin of petroleum, 144 | | i | Rossport, L. SUPERIOR, TH.B.D. | | |
| S. P. (H.R.C.) | | | Animikie formation E. of | 32 | R C |
| Acknowledgments to | 3 | Bull. iii | Iron pyrites near | 181 | A xvi |
| ..... | 185 | vii | Nickel mining near. <i>See</i> Moc- | | |
| License to | 104 | vii | casin m. | | |
| Notes by, on the nomenclature of | | | Zinc mining near. <i>See</i> Zenith m. | | |
| Wawa lake | 193 | vii | Rotary kilns. | | |
| Walter | | | For cement, notes on | 130 | A xiv |
| Part owner, Comstock gold mine. | 269 | vi | Roth, Augusta | 105 | viii |
| Norway | 31 | iii | F. | 105 | vii |
| ..... | 49 | vi | ..... | 105 | viii |
| President, Empress Gold Mg. Co. | 263 | vi | ..... | 118 | ix |
| & Co. (QUEBEC). |  |  | ..... | 143 | x |
| Owners, Victoria silver mine. | 258 | xi | ..... | 75 | xi |
| & Holgate. | 71 | A xiv | Argue & Co. | 97 | A xvi |
| Ross, ROSS TP., KENFREW CO. | | | <i>See also</i> Barnard-Roth-Argue. | | |
| Marble quarries in | 102, 103 | B xiii | Rothschild, B. | 49 | A xiii |
| Cobalt Silver Mines Co. | | | H. J. M. | 67 | xii |
| Capital and date of charter | 30 | A xvi | ..... | 75 | xi |
| lake, VERMILION RIVER, (HAN- |  |  | ..... | 48 | A xiii |
| MER TP.) | | | M. D. | 49 | A xiii |
| Gold mining on and near | 257 | vii | & Co. | | |
| notes by Coleman | 153, 154 | x | Associated with Societe le Nickel. | 182 | iv |
| Gravel beds on, altitude | 158 | x | New Caledonia nickel mines con- | | |
| lake, VERMILION RIVER, (TRILL | | | trolled by | 175 | C xiv |
| TP.) | | | Cobalt Co. | | |
| Rocks on | 196 | A xiii | Capital and date of charter | 26 | A xv |
| nickel-bearing | 210 | A xiii | Work by, 1905 | 83 | A xv |
| ..... | 23, 64 | C xiv | Rothwell, Charles Garnett | 95, 250 | vi |
| limestone quarry, E. HAWKES- |  |  | ..... | 250 | vii |
| BURY TP., PRESCOTT CO. | 99 | B xiii | Henry | 43, 50 | viii |
| nickel mine, FOY TP., ALG. | | | Evidence by, before R. C. <i>re</i> : | | |
| Rocks on and near | 200, 201 | A xiii | prospector's rights | 312 | R C |
| offset deposits | 70 | C xiv | silver, Port Arthur dist. | 200 | R C |
| tp., KENFREW CO. | | | want of railways | 240 | R C |
| Apatite in | 194 | ix | R. P. | | |
| Biotite in | 195 | ix | Arsenic works erected by, Deloro. | 112 | xi |
| Hornblende crystals in | 199 | ix | Notes by, on Richardson gold | | |
| Limestone from, analysis | 106 | B xiii | mine | 107 | R C |
| Trenton. <i>See</i> Cobden. | | | Rottbarth, Herr. | 213 | ii |
| Marl in | 107 | B xiii | Rotten=stone. | | |
| ..... | 122 | A xiv | Definition of | 541 | R C |
| Molybdenum oxide in | 194 | ii | Rouge river, ONTARIO CO. | | |
| ..... | 205 | ix | Troquois beach on | 230 | A xiii |
| | | | Limestone near | 126 | B xiii |

| | Page. | Vol. | | Page. | Vol. |
|---|-----------------|------|---|------------|------|
| Rouleau, J. | 105 | vii | Roy, Ernest | 51, 57 | xi |
| Roumania. | | | Napoleon <i>See</i> Roy Gold Mg. Co. | | |
| Nickel coinage in..... | 161 | ii | Thomas | | |
| Round bay, MISSISSAUGI RIVER, ALG. | | | Iroquois beach in Canada, first described by..... | 225 A | xiii |
| Marine deposits on..... | 137 | vi | Gold Mg. Co. | | |
| Lake, BELMONT TP., PETERBORO CO. | | | Depth of shaft sunk by, 1899.... | 35 | ix |
| Rocks near..... | 193 | xi | Work by, on Seine river, 1897. 67, | | |
| lake, BLANCHE RIVER, NIP. | | | 132, 133 | vii | |
| Explorations from, to Abitibi river, report by Bolton.... | 173-190 | xii | 1898. 42, 94 | viii | |
| Fish in..... | 189 | xii | 1899. 79 | ix | |
| Iron ore on..... | 9 A | xiii | Royal Brick Co., (Ohio). | | |
| Minor refs. to..... | 248, 261, 262 A | xiv | Analysis of shale used by..... | 119 | iii |
| Rocks on and near..... | 263, 268 A | xiv | Colonial Institute. | 4 | vii |
| lake, E. OF MOSS TP., SHEBANDOWAN LAKE DIST., TIL. B. D. | | | Commission, The (ON THE MINERAL RESOURCES OF ONTARIO). | | |
| Camp on, photo of..... | 128, 129 | xi | Report by, on Mineral Resources of Ontario..... | Vol. R C | |
| Copper on, chalcopyrite mining. <i>See</i> Tip-top Copper Mg. Co. | 196 | ix | gold mine. | | |
| Gold mining on, notes by Blue.. | 118 | v | Notes on, 1898..... | 110 | vii |
| Coleman. 75, 76 | | v | School of Mines (ENGLAND). | | |
| Map of..... | 121 | v | Notes on, by R. C..... | 493 | R C |
| Portages from, to Shebandowan lake..... | 125 | v | Society of Canada. | | |
| Quartz-porphry on, auriferous. | 87 | v | Founding of..... | 220 | i |
| Route to, from Shebandowan lake, description..... | 117-119 | v | "Royal Sovereign" H.M.S. | | |
| Storm on..... | 119 | v | Armour of..... | 150 | iii |
| Surveyed by Coleman, 1895..... | 3 | v | Sovereign gold mine, ANZHEKUMMING LAKE, R. R. D. | | |
| lake, MICHIPICOTEN DIV., ALG. | | | Notes on..... | 122 | vii |
| Rocks on..... | 202 A | xv | 247 | xi | |
| lake, SEINE RIVER, R.R.D. | | | 92 | xii | |
| Eruptive masses on..... | 119 | vi | Photo of..... | 272, 273 | xi |
| Notes on..... | 73 | vi | Royalties. | | |
| lake, TIMAGAMI LAKE DIST., NIP. | | | Anstrasia..... | 44, 45 | i |
| Farm land near..... | 57 | R C | New South Wales. 20-25, 30, 31 | | i |
| Rocks and shore line on..... | 177 | x | Belgium..... | 298 | R C |
| slates..... | 73 | i | Canada, notes by Blue.. 8-10, 47, 48 | | i |
| lake, WENEGON RIVER, ALG. | 167 | xii | Ceylon, British Columbia, Natal, Labuan and Perak..... | 43 | i |
| Roussain, John | 68 | iii | Great Britain, extracts from the British Commission's report. 15-47 | | i |
| Roussainville, L. SUPERIOR, ALG. | | | Ontario, gold and silver, abandoned..... | 128 | vi |
| Copper prospecting at..... | 73 | iii | ed..... | | |
| Photo of..... | 68 | iii | re-intro- | | |
| Rousseau, Charles | 171 | ii | duced.. | 267 | R C |
| | 66 | iii | oil, abandoned..... | 24 A | xvi |
| Rovenzon. | | | Portugal..... | 298 | R C |
| Experiments by, on iron ores.... | 357 | R C | Spain..... | 299 | R C |
| Rowan, James H. | | | 21, 25, 26, 28, 30 | | i |
| Notes by, on Woodland div., C. P. R..... | 110 | iv | United States..... | 11-15 | i |
| John | 16 | x | Royce, J. C. | 23 | xii |
| T. | 16 | x | Rubble. | | |
| Rowan, MARMORA TP., HASTINGS CO. | | | Production statistics. <i>See</i> Building-stone statistics. | | |
| Asbestos mining near..... | 246 | i | Ruble, John | 44, 45 | x |
| lake, E. OF L. OF THE WOODS, R. R. D. | 185 | v | Joseph | 44, 45, 50 | x |
| mica claim, STORRINGTON TP., FRONTENAC CO. | 133 | x | <i>Rubus chamaemorus.</i> | | |
| Rowe, E. P. | 45 | xi | Abitibi Lake dist..... | 242 A | xiv |
| F. F. | 53 | xi | Mattagami valley..... | 150 A | xv |
| Roxborough tp., STORMONT CO. | | | <i>" triflorus.</i> | | |
| Marine deposits in..... | 219 | x | Abitibi Lake dist..... | 241 A | xiv |
| peat bog..... | 190 | i | Mattagami valley..... | 150 A | xv |
| | 198 | ii | Ruby. | | |
| <i>See also</i> Warina. | | | A variety of corundum..... | 216 | vii |
| Trenton formation in. <i>See</i> Lodi. | | | Burma..... | 62 | vi |
| | | | | 241 | viii |
| | | | Composition of..... | 448 | R C |
| | | | Hardness of..... | 202 | vi |

| | Page. | Vol. | | Page. | Vol. |
|---|----------|--------|--|----------------|--------|
| Ruby. — <i>Con.</i> | | | Russell, Joseph | | |
| Mythical properties of..... | 230 | viii | Brick works of, Toronto, notes | | |
| Notes on, by Goodwin..... | 228 | vi | and photo..... | 108 | B XV |
| Specific gravity of..... | 202 | vi | V. | | |
| gold mine, WABIGOON LAKE, | | | Brick-yard of, Burks Falls..... | 88 | B XV |
| R. R. D..... | | | William W. | | |
| Notes on, by Parks..... | 179 | xii | Evidence by, before R. C. <i>re</i> — | | |
| island, MINNITAKI LAKE, | | | iron, Port Arthur dist..... | 144 | R C |
| R. R. D..... | | | mining laws..... | 312 | R C |
| Gold prospecting on..... | 71 | viii | silver, Port Arthur dist..... | 62, 203 | R C |
| lake. | | | ref. to..... | 26 | R C |
| Iron ore on..... | 144 | R C | Iron ore shown by, at Chicago..... | 81 | ii |
| | 65 | ii | Notes by, on Atikokan iron range. | | |
| silver. See <i>Pyrargyrite.</i> | | | | 72-74 | ii |
| Silver Mfg. and Development | | | | 142 | v |
| Co. | | | Brick and Tile Co. | | |
| Capital and date of charter..... | 30 | A xvi | Capital and date of charter..... | 30 | A xvi |
| Rudd, A. B. | | | co. | | |
| Iron mining by, S. Sherbrooke | | | Palaeozoic rocks in..... | 22 | B xiii |
| tp..... | 274, 275 | v | Cambr-Silurian..... | 107, 108 | B xiii |
| Mica mining by, S. Burgess tp..... | 278 | v | tp., RUSSELL CO. | | |
| W. H. | | | Limestone in, analysis..... | 108, 109 | B xiii |
| | 56 | viii | Trenton..... | 48 | B xiii |
| | 51 | ix | Miller Mining Co. | | |
| | 493 | R C | Purchase by, of Hillyer mine.... | 230 | iv |
| Rudler, F. W. | | | nickel mine, BLEZARD TP., | | |
| Ruethel Mining Co. | | | Nip. | | |
| Exhibits of, at Buffalo..... | 25 | A XV | Rocks of..... | 433 | R C |
| <i>Rumer brittanica.</i> | | | Russia. | | |
| Abitibi Lake dist..... | 241 | A xiv | Anorthosite from, analysis..... | 226 | viii |
| " <i>verticillata.</i> | | | Corundum in, notes..... | 213 | vii |
| Mattagami valley..... | 151 | A XV | | 234-236 | viii |
| Rumsey, Mo. | | | Iron and steel production of, 1886..... | 224 | R C |
| Wire-rope tramway at..... | 353 | R C | Miaskite in..... | 213 | vii |
| Rundle, Lewis Philip | | | Nickel steel for battleships of.... | 196 | iv |
| Rupert House, JAMES BAY, QUE. | | | Peat in, industry, notes by | | |
| Mission at..... | 192 | viii | Michell..... | 217, 218 | ii |
| Rupert's land, QUE. | | | used on railways..... | 202 | i |
| Historical notes <i>re</i> | 196 | v | Platinum mining in..... | 190 | ii |
| Rush, George | | | | 143 | vii |
| Robert | | | Schungite from, analysis..... | 165, 166 | vi |
| Gold mining by, Michipicoten | | | <i>Russosipoun.</i> | | |
| div..... | 113 | ix | Hamilton (near)..... | 141 | xii |
| | 73 | xi | Rust, Ezra | | |
| Licence to..... | 105 | viii | Gold mining by, Seine River reg..... | 81 | ix |
| | 118 | ix | President, Jack Lake Gold Mfg. | | |
| | 143 | x | Co..... | 106 | x |
| | 75 | xi | | 148, 256 | xi |
| W. | | | Ruthenburgh. | | |
| bay, L. OF THE WOODS, R. R. D. | | | Views of, <i>re</i> magnetic concentra- | | |
| Gold mining on..... | 61 | A xiii | tion of iron ores..... | 331 | xii |
| See also <i>Golden Horn mine</i> | | | Rutherford tp., ALG. | | |
| Bay gold mine. See <i>Golden</i> | | | Iron ore in. See <i>Killarney.</i> | | |
| Horn mine. | | | Ornamental stone in..... | 93 | i |
| Bay Golden Horn Mfg. Co. | | | Rocks in..... | 68, 80, 83, 84 | i |
| Capital and date of charter..... | 11 | xi | notes by Bell..... | 30, 31 | B xiii |
| See also <i>Golden Horn mine.</i> | | | See also <i>Lamorandiere</i> | | |
| Rusk co., TEXAS. | | | bay. | | |
| Iron ore in..... | 101 | ii | Ruthven, S. GOSFIELD TP., ESSEX CO. | | |
| Russell, A. L. | | | Natural gas consumption of..... | 42 | xi |
| Acknowledgments to..... | 130 | xi | supply..... | 118 | i |
| Iron ore exhibited by, at Chicago..... | 82 | ii | Rutile. | | |
| Licence to..... | 118 | ix | Occurrences of..... | 208 | ix |
| Map by, of Manitou dist., ref. to..... | 42 | ix | Specific gravity of..... | 233 | xiii |
| C. P. | | | United States, production, 1888..... | 525 | R C |
| E. F. | | | Rutland, Rutland CO., Vt. | | |
| G. H. | | | Marble of..... | 80, 81 | R C |
| I. C. | | | quality..... | 63 | B xiii |
| Ref. to surveys by, in Dakota.... | 157 | vii | | | |

| | Page. | Vol. | | Page. | Vol. |
|--|----------|--------|--|---------------|--------|
| Rutledge, J. J. Description by, of Davis pyrites mine, Mass. | 191 | A xvi | S 140 gold loc. See Jenny Leigh mine. | | |
| Rutley, Frank Asbestos defined by | 93 | iii | 141 gold loc. See Boulder gold mine. | | |
| Ruttan, J. F. | 182 | iii | 170, 172 gold locs. See Cameron mine. | | |
| Ruttmann, F. S. Ref. to work by, on magnetic concentration of iron ores. | 338 | xii | 182 gold loc. See Sirdar mine. | | |
| Ryan, Hugh | 136 | R C | 450=465, 492 gold locs. See Northern Light Mines Co. | | |
| James | 55, 57 | xi | 500 gold loc., EAGLE LAKE, R. R. D. | 66 | A xiii |
| M. Brick-yard of, Smiths Falls. | 76 | B xv | Sabascosing bay, L. OF THE WOODS. | 117 | vii |
| P. A. | 10 | B xiv | Sabawe (WALSH) gold mine, SA- BAWE LAKE. | | |
| T. J. Mining Land Agent, Sudbury. | 145 | x | Notes on, 1900 | | x |
| Report by, 1900 | 147, 118 | x | 1901 | 150 | xi |
| 1901 | 82 | xi | 1903 | 72 | A xv |
| 1902 | 49 | xii | Operations suspended | 242 | xi |
| 1904 | 34 | A xiv | lake, ATIKOKAN RIVER, R. R. D. | | |
| Trustee, Mineral collection, Sud- bury. | 200 | vi | Description of, by Blue. | 141, 142 | v |
| Work by, 1900 | 6 | x | Gold mining on. See Sabawe gold mine. | | |
| Hon. Thomas | 140 | vi | Iron ore near | 72, 73 | ii |
| & Co., T. M. Brick-yard of, Niagara Falls, notes | 105 | B xv | details of borings. 131-133 | | xi |
| Quarrying by, Detroit river | 101 | i | mining. | 107, 111, 112 | x |
| and Hancy. Limestone quarrying by, Mel- drum Bay. | | | Pleistocene deposits on | 73 | v |
| analysis. | 75, 76 | B xiii | Rock barrier at head of | 142 | v |
| notes. | 79, 80 | B xiii | Lake Gold Mg Co. | 72 | A xiii |
| photo | 96, 97 | B xiii | Sabiston, P. W. | 110 | ix |
| tp., Alg. Fissure veins in | 75 | iii | Sable Iron Works. Labour employed at, statistics. | 370 | R C |
| Ryantou, L. SUPERIOR, TH. B. D. | 85 | v | river, L. HURON. See Ausable river. | | |
| Rydalbank, PLUMMER TP., ALG. Farm lands at | 152 | viii | Safes. Canadian imports of, 1881-1887. | 252 | R C |
| Glacial striae at, direction. | 157 | viii | Safflor (CORAL OXIDE). For glass staining | 75 | B xiv |
| Rocks north of | 159 | viii | Safflorite. Cobalt dist. | 99 | A xiii |
| Rymal, WENTWORTH CO. Gas piped to | 106 | A xiv | Sagandeba lake, NIVEN'S BASE LINE, ALG. | 138, 139 | ix |
| Limestone from, as flux ... | 125, 126 | B xiii | Sage, H. | 49 | A xiii |
| | | | M. | 143 | x |
| | | | 75 | xi | |
| | | | 298 | xi | |
| | | | lake, MICHIGOTEN DIV., ALG. Canoe routes to. | 285, 292 | A xiv |
| | | | Greenstone in | 302 | A xiv |
| | | | Sagetowwashka lake. See Sahk- atawichtah lake. | | |
| | | | Sagina lake, FORTY-MILE RIVER, JAMES BAY. | 192 | viii |
| | | | Sagitchiwaigamag lake, BOWELL TP., ALG. | 75 | i |
| | | | Greenstone in | | |
| | | | S gittaria variabilis. Abitibi Lake dist. | 241 | A xiv |
| | | | Mattagami valley. | 150 | A xv |
| | | | Sagorus phoebe. See Phoebe. | | |
| | | | Sahawachewan rapid, GROUND-HOG RIVER, ALG. | 133 | ix |
| | | | Sahkatawichtah lake, N. OF RICE LAKE, ALG. | 131, 132 | ix |
| | | | Sahlin, Axel Ref. to paper by, on tale. | 102 | iii |
| | | | work by, on treatment of magnetic ores. | 338 | xii |
| | | | St. Amand, John. | 16, 48 | xii |
| | | | St. Ammond, Augustus. | 235-240 | v |
| S 28 gold loc., MUD LAKE, R. R. D. Notes on, by Coleman. | 86 | vi | | | |
| 48 gold loc. See Victory gold mine. | | | | | |
| 56 gold loc., CAMP BAY, L. OF THE WOODS. Auriferous dike in. | 101 | vi | | | |
| 57, 71-73, 77, 78, 90-93 gold locs., CAMP BAY, L. OF THE WOODS | 101, 102 | vi | | | |
| 77 gold loc. See Trojan gold mine. | | | | | |
| 79 gold loc. See Mascotte gold mine. | | | | | |
| 86, 87 gold locs. See Campbell, Neil | | | | | |
| 94 gold loc. See Yum-Yum Gold Mg. Co. | | | | | |
| 100 gold loc., NEAR EAGLE LAKE, R. R. D. Notes on | 66 | A xiii | | | |
| 105=107 gold locs. See Gold Bullion Mg. Co. | | | | | |

| | Page. | Vol. |
|---|------------|------|
| St. Anne, E. Hawkesbury tp., Prescott co. | | |
| Fault west of | 99 B | xiii |
| Ste. Anne des Plaines, Terrebonne co., Que. | | |
| Peat at | 198 | ii |
| St. Anthony Cobalt Mg. Co. Capital and date of charter..... | 29 A | xvi |
| Gold Mg. Co. <i>See also</i> St. Anthony Reef mine. | | |
| Capital and date of charter..... | 24 A | xiv |
| Reef gold mine, Sturgeon Lake, Th. B. and R. R. Disks. | | |
| Mill erected at..... | 5 A | xiii |
| | 47 A | xv |
| Minor ref. to..... | 3 A | xiv |
| | 4 A | xv |
| Notes on, 1902..... | 82-84 | xii |
| 1903 | 70, 71 A | xiii |
| 1904..... | 54, 56 A | xiv |
| 1905..... | 59 A | xv |
| 1906..... | 6, 60 A | xvi |
| Ore from, photo..... | 80, 81 | xii |
| Photo of..... | 55 A | xiv |
| Plan of..... | 96, 67 | xii |
| Rocks on and near | 105, 106 | xii |
| Ste. Brigitte, Iberville co., Que. Peat at | 198 | ii |
| St. Catharines, Grantham tp., Lin- coln co. | | |
| Beach at | 227 A | xiii |
| Brick-yard in, notes..... | 77 B | xv |
| Cement (hydraulic) made near..... | 108 | ix |
| Gravel the site of..... | 238 A | xiii |
| Natural gas at, boring for..... | 161 | j |
| | 113, 114 A | xv |
| supplied to..... | 105 A | xiv |
| | 108 A | xv |
| Post office at, building-stone of..... | 96 | i |
| Section from, to Abino pt | 103 A | xiv |
| St. Chamond steel works. Nickel-steel plates made at..... | 151, 162 | iii |
| | 196 | iv |
| St. Charles iron mine, Near Madoc, Hastings co. | | |
| Minor ref. to | 20 | xii |
| Notes on, 1898..... | 32 | viii |
| 1900..... | 128 | x |
| 1901..... | 261 | xi |
| Ore from, at Buffalo..... | 86 | xi |
| Chicago..... | 82 | ii |
| Work at, suspended, 1902..... | 115 | xii |
| St. Clair, Mich. Salt well in, log of..... | 187 | R C |
| lake. — <i>See</i> Lake St. Clair. | | |
| river, St. Clair Lake. Canal at mouth of, notes by Blane. | 107, 108 | v |
| Natural gas in..... | 151 | R C |
| Salt on..... | 55, 182 | R C |
| method of working | 190 | R C |
| Syncline east of | 54 | i |
| Tunnel under, stone used for, 97, 107 | | i |
| | 74 B | xiii |
| Sainte Claire Deville, E. H. Calorific power of petroleum de- | | |
| termined by | 166 | vi |

| | Page. | Vol. |
|--|----------|------|
| St. David, Niagara tp., Lincoln co. Beach at | 227 A | xiii |
| Cement at | 177 | i |
| St. Denis, France. Nickel refinery at | 156 | ii |
| St. Dominique, Bagot co., Que. Peat at | 198 | ii |
| St. Edmunds tp., Bruce co. Dolomite in. — <i>See</i> Tobermory. | | |
| St. Etienne, France. School of Mines at | 494 | R C |
| St. Eugene, Hawkesbury E. tp., Prescott co. | | |
| Limestone near | 98 B | xiii |
| Consolidated Mg. Co. Capital and date of charter..... | 9 | xii |
| St. Francis lake, Que. Calciferous formation on (Hungry | | |
| bay) | 47 B | xiii |
| river, Chaudiere River, Que. Blast furnace in valley of..... | 27, 28 | ii |
| River Mg. Co. | 27 | ii |
| St. Francois, Montmagny co., Que. Iron ores of | 346 | R C |
| St. George, Louis Mica mining by, Ferguson tp..... | 280 | v |
| St. George, S. Dumfries tp., Brant co. | | |
| Gas piped to | 23 A | xv |
| lake, Oso tp., Frontenac co. Apatite mining on..... | 240 | i |
| suspended | 251 | ii |
| <i>See also</i> Blessington | | |
| mines. | | |
| lake, North Channel, L. Huron | 109 | v |
| Saint George Mines Development Co. Capital and date of charter..... | 10 | ix |
| St. Gothard mt., Lepontine Alps, Switzerland. | | |
| Corundum in..... | 241 | viii |
| St. Henry, Ohio. Natural gas in, depth and pres- | | |
| sure..... | 155 | i |
| St. Hubert, Chambly co., Que. Peat bogs at | 197, 198 | ii |
| St. Ignace, Mich. Charcoal furnaces at | 339, 481 | R C |
| | 99, 100 | ii |
| island, L. Superior. Agate on | 192 | ix |
| Calcite on | 195 | ix |
| Ice-land-spar..... | 194 | ii |
| | 200 | ix |
| Copper on..... | 36 | R C |
| native..... | 197 | ix |
| Rocks on..... | 37, 67 | R C |
| trap..... | 15 | v |
| St. Jean, Napoleon. | 39, 41 A | xiii |
| St. Joe gold mine, Madoc tp., Hast- ings co. | | |
| Notes on, 1898 | 89 | vii |
| St. John, Phelias | 55, 57 | xi |
| St. John, St. John co., N.B. Lime industry of, notes by Bailey. | 10 B | xiii |
| lake, Ontario co. Limestone on | 89 B | xiii |

| | Page. | Vol. | | Page. | Vol. |
|--|-------|---------|---|----------|-----------|
| St. John tp., Nip. | | | St. Mary sandstone. | | |
| Soil in, and timber..... | 125, | 126 A | Age of..... | 190 A | xv |
| peat, analysis..... | 128 A | xv | Lake Superior..... | 143, | 164 viii |
| St. Joseph island, L. Huron. | | | Grindstone pt..... | 189 A | xv |
| Agricultural land on..... | 103 | iv | Poin e aux Mines..... | 129 | viii |
| Erie clay on, analysis..... | 15 B | xv | Notes on, by Coleman..... | 126, | 127 viii |
| Glaciation on, notes by Coleman..... | 199 A | xv | St. Marys, ANGLAISE CO., OHIO. | | |
| Gold on, early discovery..... | 114 | R C | Natural gas in, depth and pres- | | |
| Huronian northward of..... | 71 | i | sure..... | 155 | i |
| contact with Silurian..... | 38 | iii | St. Marys, BLANSHARD TP., PERTH | | |
| Iron on, metallic..... | 191 | ii | co. | | |
| native..... | 200 | ix | Artesian wells at..... | 59 | i |
| Limestone on..... | 84 | R C | | 123 B | xiii |
| analysis..... | 79 B | xiii | Boring at for gas, proposed..... | 21 | x |
| quarried..... | 178 | ii | Calcite from..... | 14 B | xiii |
| Vegetables from, for Bruce mines..... | 174 | ii | Drift deposits W. of..... | 69 B | xiii |
| Lake, ONT. AND KEE. | | | Fossils from..... | 151, | 152 xii |
| Distance from, to mouth of Pig- | | | <i>Panuka grandis</i> | 126, | 127 xi |
| eon river..... | 197 | v | Limestone at, analysis..... | 151 | xii |
| Huronian on and near..... | 18 | R C | boring in..... | 51-53 | xii |
| | 124 | iv | forsugar factories, 3, 25 B | | xiii |
| Iron on and near..... | 22 | R C | kilns and quarries..... | 151, | 152 xii |
| silver mine, OLIVER TP., | | | | 11 A | xiii |
| Th. B. D..... | 236 | i | | 96 B | xiii |
| | 239 | ii | photos..... | | |
| St. Julien de Valgalques, FRANCE. | | | 96, 97, 126, 127 B | | xiii |
| Pyrites a..... | 192 A | xvi | Railway bridge at, photo..... | 96, 97 B | xiii |
| St. Lawrence co., N. Y. | | | St. Mary's Portland Cement Co. | | |
| Marble of, character..... | 80 | R C | Capital and date of charter..... | 37 A | xiii |
| Pyrites mining in, notes..... | 190, | 191 A | Quarries, Ltd. | | |
| Marble Co. (GOVERNEUR, U.S.) | | | Capital and date of charter..... | 21 A | xiii |
| Evidence <i>cc.</i> before R. C..... | 90 | R C | Exhibits of, at Buffalo..... | 25 A | xv |
| Minor ref. to..... | 63 B | xiii | St. Maurice, CHAMPLAIN CO., QUE. | | |
| river. | | | Peat at..... | 198 | ii |
| Corundum in sands of (Que.)..... | 214 | vii | Smelter at..... | 24 | ii |
| Fossils in valley of..... | 50 | R C | St. Patrick street, TORONTO. | | |
| Glaciation on (Ont.), notes by | | | Paving of..... | 17 | v |
| Coleman..... | 243, | 244 A | "St. Paul" ss. | 188 | iv |
| marine deposits..... | 216 | x | St. Paul, RAMSEY CO., MINN. | | |
| Natural gas in..... | 126 | i | Brick pavements in..... | 108 | iii |
| Salt water in valley of (Que.)..... | 32 B | xv | Cobalt Mg. Co. | | |
| Saugeen clay on (Que.)..... | 32 B | xv | Capital and date of charter..... | 30 A | xvi |
| Terraces on..... | 227 | x | portage, MISSISSAUGA RIVER, | | |
| St. Leon, MASKINGOGE CO., QUE. | | | ALG..... | 195 | viii |
| Natural gas at..... | 126 | i | St. Peter, falls, MISSISSAUGA RIVER, | | |
| "St. Louis" ss. | 188 | iv | ALG..... | 195 | viii |
| St. Louis, WASHINGTON, U. S. | | | | 145 A | xiii |
| Smelter at, cost of..... | 392 | R C | St. Petersburg prov., RUSSIA. | | |
| Technical schools in..... | 505, | 508 R C | Peat in..... | 216 | ii |
| University at, notes by Richards..... | 512 | R C | St. Pierre, MARTINIQUE. | | |
| St. Mary rapid, SAULT STE. MARIE. | | | Disaster at, caused by gas..... | 93 A | xiv |
| Fall of..... | 151 | viii | St. Rollos, GLASGOW, SCOTLAND. | | |
| river, L. HURON. | | | Copper smelting at..... | 403 | R C |
| Beaches near, notes by Coleman..... | 152 | viii | St. Stephen, CHARLOTTE CO., N. B. | | |
| Geology of, notes by Coleman..... | 126 | vii | Pyrrhotite deposits at..... | 88 | i |
| Huronian on..... | 158 | vii | | 145 C | xiv |
| Marble on..... | 76, | 83 R C | St. Sulpice, L'ASSOMPTION CO., QUE. | | |
| quarrying..... | 13 B | xiii | Peat at..... | 198 | ii |
| Quartzites north of..... | 72 | i | St. Thomas, YARMOUTH TP., ELGIN | | |
| Sandstone of..... | 133 | vi | co. | | |
| <i>See also</i> St. Mary sandstone..... | | | Brick-yard at, notes..... | 62, | 63 B xv |
| Waterpower on..... | 37 | v | Car-wheel works at..... | 329 | R C |
| | 252 | vii | Natural gas at, boring for..... | 108 A | xiv |
| | 91 | xi | Water supply of..... | 60 | i |
| river, PERTH CO. | | | St. Vincent tp., GREY CO. | | |
| Limestone on, boring in..... | 52 | xii | Brick-yard in..... | | |
| | | | <i>See</i> Meaford..... | | |
| | | | Silurian rocks in..... | 48, | 49 B xiii |

| | Page. | Vol. | | Page. | Vol. |
|--|-------------------|--------|---|--------------|--------|
| Sailor Consolidated Mg. & Milling Co. | | | Salt. <i>Con.</i> | | |
| Capital and date of charter | 10 | ix | Statistics of, -- <i>Con.</i> | | |
| Saïrey Gamp lake, NEAR MANITU | | | 1901 | 13, 36 | xi |
| LAKE, R. R. D. | | | 1902 | 12, 13, 38 | xii |
| <i>See also</i> Gold Standard Mg. Co. | | | 1903 | 2, 4, 22 | A xiii |
| Gold mining on | 100 | x | 1904 | 1, 3, 20 | A xiv |
| suspended | 250 | xi | 1905 | 1, 4, 21 | A xv |
| Minor ref. to | 87 | vi | 1906 | 4, 6, 23 | A xvi |
| Sakoose gold mine, NEAR DYMENT, | | | United States, Marine City | 55, 187, 190 | R C |
| R. R. D. | | | production, 1887 | 228 | R C |
| Accident at | 53, 57 | xi | 1888 | 525 | R C |
| Notes on, 1900 | 91, 101, 102 | x | royalty | 14 | i |
| Producing, 1902 | 15 | xii | Western counties, estimated | | |
| Work on, suspended | 251, 255 | xi | area | 33 | vi |
| Mining Co. | | | Wielieza, Galicia | 178 | i |
| Capital and date of charter | 11 | xi | Works producing, list of; visited, | | |
| Sala, I. | 167 | iii | 1899 | 111 | ix |
| Salem dist., MADRAS PRES., E. IN- | | | | | |
| DIA. | | | | | |
| Corundum in | 231, 232 | viii | Bothwell | 55, 186 | R C |
| Salina formation. | | | Courtright | 85 | R C |
| Lambton co., thickness | 98 | A xiv | boring for | 186 | R C |
| Port Colborne | 129 | i | notes by Carter | 191 | R C |
| Salisbury iron dist., U.S. | | | Enniskillen tp., depth of | 26 | v |
| Iron ore of | 329, 342 | R C | Glencoe | 160 | R C |
| <i>Salix.</i> <i>See</i> Willow. | | | Goderich, boring for | 185 | R C |
| " <i>nigra.</i> <i>See</i> Willow, black | | | notes by McEwan | 54, 190 | R C |
| Salmon. | | | Ransford | 189 | R C |
| James bay and tribes | 133 | iv | depth | 55 | R C |
| trout. <i>See</i> Trout, salmon | | | discovery | 21 | A xiii |
| Sals, Frank | 33, 35 | A xvi | ref. to Hunt's report | 184 | R C |
| Saloons. | | | works | 111 | ix |
| Dangers of, in mining camps | 57 | A xiii | 22 | A xiii | |
| Salt. | | | 20 | A xiv | |
| Area of fields | 181-182, 210, 228 | R C | Kincardine | 45, 55, 189 | R C |
| Borings for, various logs | 184, 187 | R C | boring | 184 | R C |
| Canada, exports, 1881-87 | 245 | R C | notes by Merritt | 183 | R C |
| production, 1870, 1880 | | | works | 22 | A xiii |
| 1887 | 209 | R C | 20 | A xiv | |
| 1888 | 525 | R C | 23 | A xvi | |
| Connexion of, with duty on coal | 236 | R C | <i>See also</i> Ontario Peo- | | |
| Consumption of English and | | | ple's Salt Co. | | |
| Canadian | 236 | R C | Manitoulin island | 167 | R C |
| Distribution of, notes by Blue | 178 | i | Moose river, possibility of | 127 | iv |
| Duty on, effect of | 217 | R C | Parkhill | 55, 186 | R C |
| Evidence <i>re.</i> before R. C. | 187-191 | R C | Port Franks | 55, 183, 190 | R C |
| Hardness of | 448, 535 | R C | St. Clair river | 55, 182 | R C |
| Notes on, by Goodwin | 223 | vi | method of working | 190 | R C |
| Onondaga formation | 45 | R C | Seaforth, analysis | 208 | ix |
| 170 | i | | boring for | 185 | R C |
| Production of, notes on pro- | | | evidence before R. C. | | |
| cesses | 182-184 | R C | 54, 55, 187-189 | R C | |
| Sperenberg, near Berlin, Ger | | | Windsor, boring for | 33 | vi |
| many | 178 | i | process. | | |
| Statistics of, 1870, 1880 | 210 | R C | For copper smelting, notes by | | |
| 1886, 1887 | 228, 243 | R C | Borron | 403 | R C |
| 1888 | 72 | R C | "Salting." | | |
| 1891 | 6 | i | Made a felony in Wyoming | 284 | R C |
| 1892 | 8, 11 | ii | <i>See also</i> Tin. | | |
| 1893 | 7, 10 | iii | Salt water. <i>See</i> Water, salt | | |
| 1894 | 11 | iv | Salter tp., ALG. | | |
| 1895 | 11, 20 | v | Agricultural land in | 103 | iv |
| 1896 | 13, 32 | vi | Copper in | 23 | xi |
| 1897 | 13, 23 | vii | mining | 120 | x |
| 1898 | 11, 17 | viii | 81 | xi | |
| 1899 | 12, 13 | ix | 98 | xii | |
| 1900 | 11, 12, 23 | x | 79 | A xiii | |

| | Page. | Vol. | | Page. | Vol. |
|---|------------|-------|--|-----------------|--------|
| Salter tp.—Con | | | Sand lake, PROUDFOOT TP., P.S.D. | | |
| Copper in, mining. <i>Con.</i> | | | Rocks near, notes by Coleman. | 171, 172 | ix |
| See also <i>Hermann mine.</i> | | | =lime brick. | | |
| Massey Station mine. | | | Notes on, by Gibson | vi | B xiii |
| Minor ref. to | 63 | A xiv | Point, McNAB TP., RENFREW CO. | | |
| Saltfleet tp., WESTWORTH CO. | | | Iron mining at | 138 | R C |
| Brick-yard in. See <i>Fruitland.</i> | | | Limestone quarries at | 104, 105 | B xiii |
| "Salty Jack" s.s. | 84, 85 | x | pt., LA CROIX MILLE LACS, TH. B. D. | | |
| Salzburg, SALZBURG PROV., AUSTRIA. | | | Drift deposit at | 74 | v |
| Arsenic mining near | 101 | xi | Glacial striae near | 89 | v |
| Samarshire. | | | Minor ref. to | 113, 117, 135 | v |
| Lyndoch tp. | 208 | ix | Vegetables at | 114 | v |
| Maisonneuve tp., Que. | 237 | vii | Point City, RAINY LAKE, MINN. | | |
| <i>Staphylinus ruficornis.</i> | | | Deserted, 1895 | 63 | v |
| Abitibi Lake dist. | 241 | A xiv | Gold mining near | 55 | iv |
| Mattagami valley | 150 | A xv | Population of | 161 | v |
| Sammons, P. B. | 118 | vii | Point island, RAINY LAKE, U.S. | | |
| Sampson, Capt. William T. | | | Dike rocks on | 93 | iv |
| Notes by, on nickel-steel | 197 | iv | Gold mining near | 55 | iv |
| W. J. | 105 | viii | Sand beds on | 76 | iv |
| Samson, Dr. James | 126 | i | Surveys around, ref. to | 40 | iv |
| Samuelson, Bernard | 491 | R C | river, L. SUPERIOR. | | |
| San Augustin Mining Co. | | | Beaches at mouth of | 153, 155 | viii |
| Capital and date of charter | 12 | vii | Description of, by Coleman | 131 | viii |
| San Francisco, CAL. | | | Sandhar lake, DOG RIVER. See Obatonga lake. | | |
| Paving clay from, analysis | 120 | iii | Sandherry river, VERMILION RIVER, NIP. | | |
| San Miguel mine, MADRID PROV., SPAIN | | | Beaches along | 106 c | xiv |
| Mispickel in | 101 | xi | Moraines east of | 102 c | xiv |
| Sancton, A. H. | 67 | A xv | Nickel ore near | 199 | A xiii |
| Sand. | | | Sanders, E. H. | 105 | viii |
| Canadian exports of, 1881-87 | 245 | R C | George. | 187 | vii |
| For mortar, notes by Gillespie. | 171, 172 | A xiv | Samuel | 200, 201 | iv |
| Missinaibi river, for glass making | 128 | iv | Sandfly lake, ROBERTS TP., ALG. | | |
| Bay copper location, PL. MAMMENSE, ALG. | | | Iron range near | 224 | A xiii |
| Area of, and description | 241-243 | ii | Sandhill lake, W. OF PIPESTONE LAKE, R. R. D. | 88 | vi |
| Copper mining on | 68, 69 | iii | portage, BLANCHE RIVER, NIP. | | |
| Dialase in, petrography | 73-75 | iii | Description of, by Miller | 225 | xi |
| Exploration of, difficult | 170 | viii | Sandhurst, Vic. See Bendigo. | | |
| Idle, 1897 | 72 | iii | Sandoe, Richard | | |
| Rocks on and near | 128 | viii | Manager, East End mine | 83 | vii |
| creek, L. NIPIGON. | 78, 79 | iii | | 96 | viii |
| Iron mining near | | | Tip-top mine | 53, 56 | A xiii |
| See also AL 412; H F 1; H F 4; H F 5 | | | | 61 | A xv |
| Minor ref. to | 107, 110 | A xvi | | 61, 173 | A xvi |
| Pleistocene deposits on | 135 | A xvi | Sandpiper. | | |
| Rocks on, arkose (scarce) | 145 | A xvi | Abitibi dist. | 253 | A xiv |
| Iron formation | 143 | A xvi | Sandstone. | | |
| dunes. | | | As a building-stone | 134, 135 | iii |
| Brighton, photo | 224, 225 | x | As strata for artesian wells | 51 | i |
| flies. See <i>Flies, sand</i> | | | Definition of | 541 | R C |
| Island river, REDGUT BAY, RAINY LAKE, R. R. D. | | | | 235 | vi |
| Building-stone on | 76 | iv | Duty on, effect of | 235 | R C |
| Gneiss on, character | 78, 79, 94 | iv | Exhibit of, at World's Fair | 186 | ii |
| Schists on | 85 | iv | Quarrying industry, 1890 | 98-100 | i |
| lake, N. OF GUNFLINT LAKE, TH. B. D. | | | | | |
| Iron ore near | 69 | ii | Gill (near), notes | 56 | B xiii |
| Minor ref. to | 133 | v | Hudson and James bays | 86 | i |
| | 9 | vi | | 194 | viii |
| | | | Inglewood (near) | 110 | ix |
| | | | Lake Superior | 62, 74, 79, 235 | R C |
| | | | | 130, 132 | vi |
| | | | Thunder bay | 233 | R |

| | Page. | Vol. | | Page. | Vol. |
|--|----------|--------|--|--------------|--------|
| Sandstone. — <i>Con.</i> | | | Saponite. | | |
| Michipicoten div., petrographi- cal notes..... | 183 | ix | L. Superior, N. shores, in copper- bearing rocks..... | 131 | vi |
| Gros Cap, notes by Willmott..... | 145 | viii | Port Arthursilver dist..... | 192 | ix |
| Mono tp..... | 110 | ix | 52, 57, 58 B..... | 52, 57, 58 B | xiv |
| Sudbury dist..... | 206, 207 | A xiii | Beaver silver mine..... | 208 | ix |
| Chelmsford, notes..... | | | Sapphire. | | |
| 10, 96-100, 133..... | 134 | C xiv | Composition of..... | 148 | ix |
| Larchwood, photo..... | 99 | C xiv | Hardness of..... | 148 | ix |
| Sandt, G. F. | 136 | xii | 202..... | 202 | vi |
| Sandusky, Ohio. | | | Hastings co. (?)..... | 248 | viii |
| Cincinnati group in..... | 116 | i | Kashmir..... | 230, 231 | viii |
| Fish curing at..... | 66 | iii | Mythical properties of..... | 230 | vii |
| Gypsum of, origin..... | 120 | R C | Notes on, by Goodwin..... | 229 | vi |
| Natural gas at, depth and pres- sure..... | 155 | i | Specific gravity of..... | 202 | vi |
| Sandwich, W. SANDWICH TP., ESSEX CO. | | | Variety of corundum..... | 216 | vii |
| Bricks at, price of..... | 15 | A xiii | Sardinia, ITALY. | | |
| yard, notes on..... | 64 | B xv | Mineral lands in, sale of..... | 297 | R C |
| Natural gas, consumption of..... | 42 | xi | Sargeant, F. D. | 63 | viii |
| Petition by, <i>re</i> gas export to De- troit..... | 41 | xi | W..... | 32 | xii |
| (West) tp., ESSEX CO. | | | Sargon (KING OF BABYLON) | 108 | iii |
| Salt and natural gas in. <i>See</i> Windsor. | | | Sarminen, Emil | 45, 48 | xii |
| Sandy Bay portage, MISSISSAUBI RIVER, ALG. | 195 | viii | Sarnia, SARNIA TP., LAMBTON CO. | | |
| Hook, MONMOUTH CO., N.J. | | | Island portion of, notes..... | 108 | v |
| Armour plate trials at..... | 196 | iv | Oil refinery at..... | 157, 165 | R C |
| inlet, TIMAGAMI LAKE, NIP. | | | 40..... | 40 | xi |
| Greenstone on..... | 172 | x | 10..... | 10 | xii |
| lake, PETERBORO' CO. | | | notes..... | 101 | A xvi |
| Limestone on..... | 97 | B xiii | <i>See also</i> Imperial Oil Co. | | |
| Trenton..... | 113 | B xiii | Salt works at..... | 22 | A xiii |
| Sandy lake, R. R. D. | | | 20 A..... | 20 A | xiv |
| Character of country near..... | 176 | vii | <i>Bay Lumber, Timber and</i> <i>Salt Co.</i> | | |
| Description and geology..... | 55, 56 | y | Capital and date of charter..... | 24 | A xiii |
| Gold on, indications..... | 179 | vii | Operating 1899..... | 111 | ix |
| prospecting..... | 172 | vii | 1902..... | 38 | xii |
| Rocks on and near..... | 170 | vii | 1903..... | 32 | A xiii |
| Timber near, condition of..... | 182 | vii | 1905..... | 21 | A xv |
| <i>tp., LAMBTON CO.</i> | | | Oil in..... | 14, 15 | viii |
| <i>portage, MATAGAMI RIVER,</i> ALG. | | | industry, 1899..... | 107 | ix |
| Description of..... | 118 | A xv | <i>See also</i> Sarnia. | | |
| Minor ref. to..... | 186 | A xiv | rocks containing..... | 157 | R C |
| Rocks at..... | 210, 211 | A xiv | Sarracenia purpurea. | | |
| 132 A..... | 132 A | xv | Abitibi Lake dist..... | 241 | A xiv |
| Waterpower at..... | 130 | A xv | Mattagami valley..... | 150 | A xv |
| <i>portage, MONTREAL RIVER,</i> NIP. | | | Sasagenaga Mining Co. | | |
| Keewatin rocks near..... | 44 | B xiv | Capital and date of charter..... | 29 | A xvi |
| Turn of river at..... | 36 | B xiv | Sasaginaga lake, COLEMAN TP., NIP. | | |
| <i>river, NIPIGON LAKE, TH. B. D.</i> | | | Minor ref. to..... | 52 | A xvi |
| Iron-bearing rocks near..... | 212 | x | Rocks on..... | 44 | B xiv |
| <i>river, SANDY LAKE, R. R. D.</i> | | | Saskatoons. <i>See</i> Bilberries. | | |
| Pine on..... | 172 | vii | Sauer, Adolf | | |
| Sanford, Joseph | 47, 48 | xii | Analysis by, of graphitoid..... | 166 | vi |
| W. E. | | | Saugeen clay. | | |
| Aid from, to Carbide Willson.... | 140 | iv | Analyses of. <i>See below</i> under Notes and Pembroke. | | |
| Marble quarry of..... | 64 | B xiii | Annprior..... | 34 | B xv |
| Sanicula marilandica. | | | Bracebridge..... | 82, 83 | B xv |
| Mattagami valley..... | 150 | A xv | Birks Falls..... | 88 | B xv |
| Sanitation. | | | Casselman..... | 33, 34, 97 | B xv |
| Moss litter for..... | 197 | ii | Credit Forks..... | 167 | i |
| Saniter, H. | | | Description of, and distribution..... | 51 | R C |
| Process of, for desulphurizing metallic iron..... | 92-95 | ii | For brick-making..... | 167, 177 | i |
| Sapawe. <i>See</i> Sabawe. | | | Fossils of..... | 26 | B xv |
| | | | Huntsville..... | 89 | B xv |
| | | | Larder lake..... | 214 | A xvi |
| | | | Named by Bell..... | 4 | R C |
| | | | New Liskeard..... | 84 | B xv |

| | Page. | Vol. | | Page. | Vol. |
|--|----------------|--------|---|--------------|--------|
| Saugeen clay. — <i>Con.</i> | | | Sault Ste. Marie. — <i>Con.</i> | | |
| Notes by Gibson..... | 126 | iii | Rocks at and near:— | | |
| and photos..... | 18-27, 33 | B xv | Huronian..... | 157 | viii |
| North Bay..... | 83 | B xv | Keweenawan..... | 273 | A xiv |
| Ottawa and Paisley..... | 19, 33 | B xv | sandstone..... | 168 | viii |
| Pembroke..... | 19, 20, 33, 34 | B xv | Potsdam..... | 86 | i |
| analysis..... | 96 | B xv | Steel plant at..... | 46 | R C |
| Plantagenet..... | 31 | B xv | ..... | 204 | v |
| Position of, in Palaeozoic..... | 53 | i | ..... | 25 | xi |
| Powassin..... | 88 | B xv | ..... | 3 | B xiii |
| Sault Ste. Marie..... | 57 | B xv | ..... | 44 | A xiv |
| Slaking of..... | 39 | B xv | ..... | 17 | A xvi |
| Sturgeon Falls..... | 84 | B xv | <i>See also</i> Algoma Steel Co. | | |
| Sudbury, for furnaces..... | 56 | B xv | Sulphide pulp mill at..... | 38 | xii |
| Vankleek Hill..... | 34 | B xv | Works at, of L. Superior Power | | |
| Wakerton..... | 19, 33, 60 | B xv | Co., notes..... | 66, 67 | xi |
| Whitefish..... | 57 | B xv | <i>dist.</i> , ALG. | | |
| Oil Co. | | | Copper in..... | 23 | R C |
| Capital and date of charter..... | 9 | xii | Gold and silver in..... | 59, 60, 106, | 203 |
| river. | | | Iron in..... | 123, | 205 |
| Cement works on..... | 113 | A xiv | Silver in..... | 203 | R C |
| Onondaga formation on..... | 45 | R C | Light and Power Co. ... 61 | | x |
| Lithographic stone on..... | 45 | R C | Mining div. | | |
| Saugeen clay on..... | 36 | B xiii | Creation of..... | 36 | A xvi |
| tp. , BRUCE CO. | 18 | B xv | Description of..... | 40 | A xvi |
| Boring in, for salt. <i>See</i> Port | | | Nickel Mg. and Agency | | |
| Elgin. | | | Co. | | |
| Saukville, OZAUCKEE CO., WIS. | | | Capital and date of charter..... | 12 | vii |
| Diamond found at..... | 121 | ix | North Shore Mg. Co. | | |
| Saults, J. | | | Capital and date of charter..... | 12 | vii |
| Brick-yard of, Tamworth..... | 56 | B xv | Pulp and Paper Co. ... 197 | | viii |
| Sault Gray Copper Co. |  |  | ..... | 61 | x |
| Capital and date of charter..... | 9 | xii | ..... | 62 | xi |
| Work by, McMahon tp..... | 273 | xi | railway, ALG. | | |
| Sault Prospecting & Development | | | Rocks along, notes by Coleman..... | 163 | viii |
| Co. | | | Saults, Mrs. W. W. | 118 | ix |
| Capital and date of charter..... | 9 | xii | ..... | 143 | x |
| Copper Queen mine owned by..... | 99 | xii | Saunders, Cole | 80 | A xiv |
| Work by, Morin tp..... | 272 | xi | ..... | 90 | A xv |
| Sault Ste. Marie, MICH. AND ONT. |  |  | ..... | 76 | A xvi |
| Accident at, shooting rapids..... | 109 | v | Thomas G. | 247 | iv |
| Agricultural land near..... | 103 | iv | Saussurite. | | |
| Beach near..... | 168 | viii | Rainy River dist., in gabbro..... | 208 | ix |
| ..... | 175 | ix | Sauve, Napoleon. | 173 | iii |
| Brick-yard at, notes..... | 57, 58 | B xv | Savage, Anthony. | 201, | 206 |
| clay for..... | 20 | B xv | H. E. | 40, 45 | A xv |
| analysis..... | 27 | B xv | James | | |
| Calcium carbide plant at..... | 37 | v | Gold prospecting by, L. of the | | |
| Canals at, notes by Blue..... | 109, 110 | v | Woods..... | 102 | vi |
| Caustic-soda works at..... | 14 | B xiii | R. E. <i>See</i> Savage silver mine. | | |
| Established, 1670..... | 197 | v | Cobalt Silver Mg. Co. | | |
| Iron ores near, notes by Cole- | | | Capital and date of charter..... | 26 | A xv |
| man..... | 187, 188 | x | Mines of Cobalt, Ltd. | | |
| Metallurgical industries at, paper | | | Capital and date of charter..... | 30 | A xvi |
| by Speller..... | 61-68 | x | Work by, 1905..... | 86 | A xv |
| Mineral industries of, paper by | | | silver mine, COLEMAN TP., NIP | | |
| Willhuott..... | 91-100 | xi | Notes on, 1905..... | 86 | A xv |
| Minerals in dist. of, evidence be- | | | Owners of..... | 52 | A xvi |
| fore R. C. | 59, 60 | R C | Savanne. <i>See</i> Savant. | | |
| Mining class at, 1895..... | 6, 217 | v | Lumber Co. | 113 | v |
| 1896..... | 198 | vi | Savant, TH. B. D. | | |
| 1897..... | 260 | xii | Country between, and Mine Cen- | | |
| Recorder's office at..... | 36 | A xvi | tre, notes by Blue..... | 135-154 | v |
| Photos of..... | 96, 97 | xi | Distance from, to L. Shebando- | | |
| old channel and plant..... | 64, 65 | x | wan..... | 117 | v |
| | | | Geology of dist. of..... | 74 | v |
| | | | Gold near..... | 230 | iv |
| | | | Navigation between, and Baril | | |
| | | | portage..... | 121 | v |

| | Page. | Vol. | | Page. | Vol. |
|--|-------------|------|---|---------------|------|
| Savant lake, FR. B. D. | | | Sawden, T. | | |
| Alluvial gold mining on | 18, 149 | xi | Brick-making by, Toronto | 108 B | xv |
| Magnetite on, notes by Miller | 313 | xii | Sawtooth hills, L. SUPERIOR. | | |
| Notes on, by McInnes | 88 | xii | Laccolithie sills of | 256 A | xiv |
| Photo. of island in | 96, 97 | xii | Sawyer, Alexander | 143 | R C |
| Route to, from Sturgeon lake. | | | Bannell | 83 | viii |
| description | 87, 88 | xii | E. L. | 43 | ix |
| river, Lac des Mille Lacs. | | | bay, L. SUPERIOR. | | |
| Absence of rock outcrops on | 74 | v | Terraces near | 137 | vi |
| Character of | 113 | v | Slates near | 138 | vi |
| Glacial striae on | 89 | v | <i>Sagieara.</i> | | |
| Minor ref. to | 117 | v | Ogdensburg, N.Y., near | 242 A | xiii |
| Savard, Jerry | 133 | vii | Payne river | 219 | x |
| | 42 | viii | " <i>rugosa.</i> | | |
| Saville, Thomas | | | Abitibi river | 189 | viii |
| Silver found by, James tp. | 8 A | xvi | Crysler (near) | 218 | x |
| Savoy iron mine, ELY, MINN. | 152 | ix | Finch | 217 | x |
| | 175 | xi | James bay | 143 A | xiii |
| Savva, Morozoff & Co. | 217 | ii | Missinaibi river | 162 A | xiii |
| Saw (s). | | | Ottawa | 216, 221 | x |
| Canadian imports of, from U. S. | | | Saxicava sand | 32 B | xv |
| 1887 | 468 | R C | Saxicava sand. | | |
| Saw Bill gold mine, SAWBILL LAKE, | | | <i>See also</i> Clay, Leda | | |
| R. R. D. | | | Description of, and notes on | 32 B | xv |
| Accident at | 26 | viii | Economic uses of | 227 | x |
| Idle, 1900 | 105 | x | Ottawa dist. | 216, 217 | x |
| Notes on, 1896 | 4 Bull. i | | Saxony. | | |
| 53, 54, 76, 266 | vi | | Arsenic in, mining | 101 | xi |
| 1897 | 63, 64, 130 | vii | production | 110 | xi |
| 1898 | 41, 42, 88 | viii | Cobalt in | 61, 62 B | xiv |
| 1899 | 78, 79 | ix | early history, translation of | | |
| Photos of | 64 | vi | paper by Bruehnmüller | 74-90 B | xiv |
| Section of | 32, 33, 97 | vii | Graphitoid from, analysis | 165, 166 | vi |
| Lake Gold Mfg. Co. | | | Moss litter made in | 212 | ii |
| Capital and date of charter | 7 | vi | Nickel first produced in | 146 C | xiv |
| Work by. <i>See</i> Saw Bill g. m. | 12 | vii | Sayers, Edward | | |
| Sawdust. | | | Statement by, <i>re</i> fowls, Caribou | | |
| Gas from, for smelting, 390, 393, 483 | R C | | island | 132 | viii |
| Saw fly, American | | | hostile Indians | 129 | viii |
| Abitibi dist. | 128 A | xiii | Work by, 1898 | 121, 135 | viii |
| larch | | | H. | 105 | vii |
| Abitibi dist. | 128 A | xiii | | 105 | viii |
| | 214 A | xiv | J. | 105 | vii |
| Mattagami valley | 189 A | xiv | | 105 | viii |
| mills. | | | | 118 | ix |
| Lime-burning at, notes by Miller. | 10 B | xiii | | 142 | x |
| Sweden, in connexion with iron | | | Glen lake, MICHIGAN DIV. | | |
| foundries | 483 | R C | <i>See also</i> Helen iron mine. | | |
| Sawbill falls, OPASATKA RIVER, ALG. | | | Depth of | 155 | ix |
| Rocks at | 256 | v | Iron pyrites on | 183 A | xv |
| lake, R. R. D. | | | notes | 255 | viii |
| Gold in, discovery | 70 | v | | 169 A | xvi |
| mining | 53, 54, 267 | vi | Origin of | 194 | x |
| 1897 | 131, 132 | vii | | 171 | xi |
| 1898 | 87-90 | viii | Photos of | 176, 177 | xi |
| notes by Coleman | 4 Bull. i | | | 188 A | xv |
| 76, 77 | vi | | Rise to, from Talbot lake | 153 | xi |
| prospects | 34 | vii | Rocks on and near | 156 | ix |
| <i>See also</i> Hammond Reef m. | | | | 191 | x |
| Saw Bill m. | | | | 158, 168, 179 | xi |
| Granite on | 103 | v | breccia, photo | 176, 177 | xi |
| | 116 | vi | Grüenerite schist | 184 | xi |
| | 65 | vii | Iron formation | 130 | xi |
| altered | 87 | v | <i>Sagornis phanca. See</i> Phoebe. | | |
| Indians at, photos | 48, 49 | vi | Scadding tp., Nip. | | |
| Trail to, cut by Govt. | 10 | vi | Gold mining in | 77 | xii |
| Waterpower on | 66 | vii | Scaife Foundry and Machine Co. | 120 | ii |
| | 90 | viii | Scale of hardness. <i>See</i> Hardness. | | |

| | Page. | Vol. | | Page. | Vol. |
|--|----------|--------|---|----------|-------|
| Scales. | | | Schelin, T. J. | 105 | vii |
| Canadian imports, 1881-87 | 252 | R C | | 67 | xii |
| Factories for, Canadian, statistics, 1881..... | 116 | ii | Schenmitz, HUNGARY. | | |
| lake, NEAR WILKINSON, BRUCE CO. | | | Mining school at..... | 513 | R C |
| Mari in | 140 | A xiv | Scherk, Dr. | 202 | iv |
| Scandinavia. | | | Scheurer, Kestner Auguste | | |
| See also Norway and Sweden. | | | Calorific power of coals determined by..... | 166 | vi |
| Archean rocks of | 79 | i | Schiffler Bridge Co. | 119 | ii |
| Iron industry of, 470-472, 479, 483, 484 | | R C | Schimper, Prof. | | |
| Nickel deposits of, origin..... | 236 | xii | Notes by, on origin of peat | 182 | i |
| Peat industry in, notes on | 218-220 | ii | Schists. | | |
| Scania prov., SWEDEN. | | | Abitibi dist., petrographical notes..... | 211 | A xiv |
| Peat in | 219 | ii | Diorite changed into, by water, diagram..... | 189 | xi |
| <i>Scaphopoda</i> | | | Nipigon Lake dist., notes by Coleman..... | 131 | A xvi |
| Kwataboabegau river..... | 188 | A xiii | lake, NEAR PIPESTONE LAKE, R. R. D. | | |
| Scapolite (WERNERITE). | | | Minor ref. to | 88 | vi |
| Associated with apatite..... | 442 | R C | Rocks on..... | 61 | iv |
| Lamarck co..... | 440 | R C | conglomerate | 184 | ix |
| Renfrew co..... | 438 | R C | <i>Schizoneura tessellata</i> See Alder blight. | | |
| Exhibited at World's Fair | 188 | ii | Schlagel—? | | |
| Formation of..... | 225 | vi | Peat kilns of | 208 | ii |
| Harcourt tp..... | 48 | xi | Schlesinger Syndicate. | 116 | iii |
| Hardness of | 202 | vi | Schlickeysen, C. | | |
| Hinchinbrooke tp., notes by Miller | 229 | viii | Peat process of | 193 | i |
| Notes on | 209 | ix | Schliemann, Dr. Heinrich | 167 | i |
| Specific gravity of..... | 202 | vi | Schnabel, Carl | | |
| hornblende rock. | | | Notes by, on arsenious oxide.... | 118 | xi |
| Micro-photo of | 216, 217 | viii | Schneeberg, SAXONY. | | |
| Scarborough, SCARBOROUGH TP. | | | Cobalt-silver mining in..... | 74-90 | B xiv |
| York co. | | | output, 1904..... | 62 | B xiv |
| Beach from, to Colborne..... | 230 | A xiii | Nickel first produced at | 146 | c xiv |
| Gravel bars at | 227 | x | Schneider & Co., Henri | 501 | R C |
| Wave action at heights near, effect of..... | 230 | A xiii | 150, 151, 156 | iii | |
| Scenery. | | | Schnelle, F. O. | | |
| Abitibi river, northern portion..... | 190 | viii | Ref. to paper by, on magnetic separation..... | 342 | xii |
| L. of the Woods..... | 14 | iii | Schnorr, Hans. | 86 | B xiv |
| 170 | v | | Schoelkopp, Hartford & Hanna Co. | 122 | xi |
| L. Superior, north shore..... | 146 | viii | Schoenberger & Co. | | |
| Otter head (near)..... | 134 | viii | Iron output of, 1893..... | 119 | ii |
| Montreal river (near)..... | 130 | viii | Schoennmann, G. | 143 | x |
| Michipicoten div..... | 298, 299 | A xiv | Schofield, T. H. | 124 | vii |
| 200, 201 | A xv | | Schonichen, F. | | |
| Moose River basin..... | 178 | A xiii | Notes by, on pyrites deposits of Spain and Portugal | 172 | A xvi |
| Rainy river..... | 208 | v | School of Practical Science, TORONTO. | | |
| Schaefer, F. | | | Analysis by, of iron ore from Belmont tp..... | 61 | ii |
| Brick-yard of, Breslau, notes and photo..... | 103 | B xv | Description of..... | 193, 195 | vi |
| E. J. | 143 | x | Location of, justified..... | 419 | R C |
| 75 | xi | | Mill at, photo..... | 176, 177 | v |
| F. | 67 | xii | tests with..... | 212, 213 | v |
| Schaffault, Charles | | | Notes on | 215 | i |
| Method of, for refining nickel ores | 219 | ix | 57, 58 | x | |
| Schalcr, William | 98 | x | Photos of..... | 48, 49 | x |
| Schaud, GERMANY. | | | Report on, for 1897..... | 263-265 | vii |
| Nickel at | 146 | c xiv | Schools. | | |
| Scheele's green. | | | See also Mining schools. | | |
| As an insecticide..... | 113 | xi | Method of forming, in country districts | 137 | iv |
| Scheelite (FUNGSTATE OF LIME). | | | Schorl. See Tourmaline and Indigolite. | | |
| Description of..... | 217 | vi | | | |
| Hardness of..... | 202 | vi | | | |
| Otago dist., N. Z. | 517 | R C | | | |
| Specific gravity of | 202 | vi | | | |
| Schelin, C. | 143 | x | | | |
| G. | 143 | x | | | |

| | Page. | Vol. |
|---|----------|------|
| Schreiber, Th. B. D. | | |
| Bridge near, cost of..... | 34 | vii |
| Iron pyrites near..... | 207 | ix |
| 150, 177 A | xvi | |
| mining..... | 78 | vii |
| <i>See also</i> McKellar mine. | | |
| Morley mine. | | |
| Otisse mine. | | |
| Mispickel near..... | 106 | xi |
| Schroder, Julius | 223 | vii |
| Schroeder-Grillo process. | | |
| For sulphuric acid manufacture.. | 195 A | xvi |
| Schroutz, C. C. | 61 | vii |
| 92-94 | viii | |
| S. B..... | 64 | vii |
| 167 | i | |
| Schubze, Ernst | | |
| Analysis by, of anthracite, Penn. | 166 | vi |
| Schuchhardt, Dr. C. | 167 | i |
| Schuerer, Christian | | |
| Glass works of, at Neudeck..... | 74 B | xiv |
| Schungite. | | |
| Omega lake, Russia, analysis. | 165, 166 | vii |
| Schurman, H. | 101 | xii |
| Schuttpelz, H. | 105 | vii |
| 105 | viii | |
| Schuylkill river, Pa. | | |
| Iron industry in valley of..... | 117 | ii |
| ores..... | 474 | R C |
| Schwab, Charles M. | 22 | xi |
| 172 C | xiv | |
| Schwartz, Dr. | | |
| Analyses by, of Venetian en- | | |
| amials..... | 119, 120 | xi |
| Schweitzer, Dr. H. | | |
| Tests by, on carbide..... | 155 | iv |
| Schwendiman, F. W. | | |
| Cement making by..... | 32 | xi |
| 31 | xii | |
| 18 A | xiii | |
| 18 A | xv | |
| analysis..... | 183 A | xiv |
| quarry and plant, notes. | 165 A | xiv |
| Iron mining by, Robertsville | | |
| mine..... | 104 | ix |
| 128 | x | |
| Sclater, J. | | |
| Limestone quarries of, Downie | | |
| tp..... | 28 | xii |
| 96 B | xiii | |
| photos...96, 97, 126, | 127 B | xiii |
| 5 R | xv | |
| Scoble and Parker | 119 | ii |
| <i>Scotocophagus carolinus.</i> <i>See</i> Black- | | |
| bird, rusty | | |
| Scootamata river, MOIRA RIVER. | | |
| Rocks on..... | 200 | ix |
| marble..... | 63 B | xiii |
| <i>See also</i> Actinolite, Ont. | | |
| Water-power on..... | 98 | vii |
| Scotchman's United mine, VICTORIA, | | |
| MICH. | | |
| Deflection of bore-hole in..... | 225 | v |
| Scotland. | | |
| Archæan rocks of..... | 70 | i |
| Gold in, alluvial..... | 115 | R C |

| | Page. | Vol. |
|--|------------|------|
| Scotland.—Con. | | |
| Iron in..... | 22 | i |
| industry, notes..... | 361 | R C |
| smelting..... | 358 | R C |
| 121 | ii | |
| price in Hamilton..... | 401 | R C |
| Nickel-steel experiments in.... | xxiii | R C |
| <i>See also</i> Riley, James | | |
| Oil shales in..... | 42 | R C |
| Peat in, preparation..... | 187, 188 | i |
| Sewer-pipe from..... | 86 | R C |
| Scott, A. | 49 A | xvi |
| A. M..... | 22 | x |
| Albert | | |
| Surveys by, Michipicoten div.. | | |
| 1902..... | 279 A | xiv |
| J. H. | | |
| Guide to Coleman, 1906..... | 105 A | xvi |
| Iron mining by, Michipicoten | | |
| div..... | 118, 158 | ix |
| <i>See also</i> Scott camp. | | |
| J. J. | | |
| Director, Victoria silver mine.. | 147 | R C |
| Gold mining by, Marmora tp.... | 56 | iii |
| J. L..... | 208 | xii |
| J. M. | | |
| Brick-yard of, near Meaford.... | 65 B | xv |
| M. J..... | 98 | xii |
| R..... | 43 A | xiii |
| Robert | | |
| Brick-yard of, Perth..... | 76 B | xv |
| Sturgeon Falls.... | 84 B | xv |
| analysis of clay.... | 26, 27 B | xv |
| W..... | 112 | xii |
| William | | |
| Gas well of, Caledonia..... | 284 | v |
| Scott and Pattullo. | | |
| Quarrying by, Credit Forks..... | 98 | i |
| Scott, J. N. & Co. | 119 | ii |
| camp, N. OF BRANT LAKE, ALG. | | |
| Iron deposits of..... | 331 A | xiv |
| Map of, geological..... | 336, 337 A | xiv |
| Minor ref. to..... | 293 A | xiv |
| Trough near..... | 339 A | xiv |
| Soil near, notes..... | 176 A | xiii |
| island, SEINE BAY, RAINY | | |
| LAKE, R. R. D. | | |
| Gold mining on..... | 83 | vi |
| lake, MICHIPICOTEN DIV., ALG. | | |
| Nomenclature of..... | 158 | ix |
| quarry, NEAR RENFREW. | | |
| Analysis of limestone from..... | 106 B | xiii |
| Scotty island, L. OF THE WOODS, | | |
| R. R. D. | | |
| Gold mining on, 1898..... | 42 | ix |
| Minor ref. to..... | 181, 185 | v |
| Scovil, Dr. Simmons S. | | |
| Mikado gold mine located by.... | 105 | vi |
| Minor ref. to..... | 50 | v |
| Part owner, Sultana mine..... | 16 | iii |
| Scovil=Moore gold mine. <i>See</i> Nina | | |
| mine. | | |
| Scramble gold mine, JAFFRAY TP., | | |
| R. R. D. | | |
| Bought by Keenora Mg. and Mil- | | |
| ling Co..... | 96 | xii |
| Depth of, 1899..... | 35 | ix |
| Idle, 1899..... | 37 | ix |

| | Page. | Vol. | | Page | Vol. |
|--|----------|------|---|----------|------|
| Scramble gold mine.—<i>Con.</i> | | | Sebastopol tp.—<i>Con.</i> | | |
| Notes on, 1895..... | 186 | v | Corundum in..... | 233 | vii |
| 1896..... | 49, 108 | vi | Feldspar, aventurine, in..... | 224 | viii |
| 1897..... | 58, 59 | vii | orthoclase..... | 195 | ix |
| 1898..... | 109, 110 | vii | Hornblende crystals in..... | 188 | ii |
| Rocks in, Conchiching..... | 153 | vii | Limestone in..... | 205 | ix |
| sandstone..... | 110 | vii | 102 B xiii | | |
| | 183, 184 | ix | Cambro-Silurian... 104 B xiii | | |
| | 136 | xi | Nepheline-syenite in..... | 226, 229 | vii |
| Scramble Gold Mining Co. | | | | 224 | viii |
| Capital and date of charter..... | 13 | vii | Pyroxene in..... | 207 | ix |
| Scranton—? | | | Titanite in..... | 224 | vii |
| Analysis by, of iron ore from Bel- mont tp..... | 61 | ii | Zircon in..... | 211 | ix |
| G. G. | 105 | vii | | 188 | ii |
| Scranton, GREEN CO., IOWA. | | | | 228 | vi |
| Blast furnaces at, reason for lo- cating..... | 127 | ii | | 219, 224 | vii |
| Scrap iron. | | | | 212 | ix |
| Statistics of. <i>See</i> Iron statistics. | | | Sebenius, J. U. | 270 A | xiv |
| Screws. | | | Secondary deposits. | | |
| Canadian factories of, 1881..... | 116 | ii | Definition of..... | 451 | R C |
| imports, 1881-87... 248, 253 | | R C | Secord—? | | |
| Scrofulous diseases. | | | Copper prospecting by, 1852; suicide of..... | 194 | R C |
| Among Indians, Abitibi dist.... | 186 | viii | J. L. | 75 | xi |
| Scudder, Prof. Samuel H. | | | Laura | 163 A | xiv |
| Insects determined by, from near Ottawa..... | 225 | x | Sections. | | |
| Scugog river, VICTORIA CO. | | | <i>See also</i> Sections of mines and Microphotos. | | |
| Fossiliferous limestone opposite mouth of..... | 113 B | xiii | Abino pt to St. Catherines..... | 103 A | xiv |
| Scullion, Michael | 42 A | xv | Abitibi river, lignite..... | 174 A | xiii |
| <i>Scutellaria canescens.</i> | | | Barriefield common, Kingston.. | 231 | vi |
| Abitibi Lake dist..... | 241 A | xiv | Bosanquet tp., shales and lime- stones..... | 68 B | xiii |
| " <i>galerioides.</i> | | | Clay (Erie and Red-top)..... | 16 B | xv |
| Abitibi Lake dist..... | 241 A | xiv | London, Ont..... | 80 B | xv |
| Mattagami valley..... | 151 A | xv | Credit Forks escarpment..... | 73 | R C |
| " <i>luteiflora.</i> | | | Crow river, Hastings co..... | 59, 60 B | xiii |
| Abitibi Lake dist..... | 211 A | xiv | Decomposer for nickel extraction. | 112 | viii |
| Mattagami valley..... | 151 A | xv | Eastern Ontario gold belt, hypo- thetical..... | 187 | xi |
| Sea-level. | | | Hamilton formation, Thedford.. | 70 B | xiii |
| Eastern Canada, in early times.. | 222 | x | to Courtright.... 100, 101 A | xiv | |
| Seaforth, TUCKERSMITH TP., HERON CO. | | | Hematite mt..... | 196 | x |
| Brick-yard at..... | 71 B | xv | Joachimsthal, Bohemia, showing mineral veins..... | 63 B | xiv |
| Onondaga formation at..... | 45 | R C | Julia river, rocks near mouth. 336, | 337 A | xiv |
| Salt at, boring for..... | 185 | R C | L. Superior basin, hypothetical. | 77 | iii |
| evidence before R.C. 54, 55, 187. | 189 | R C | McKay mt., near Fort William.. | 39 B | xiv |
| works..... | 22 A | xiii | Manitoulin island:— | | |
| | 20 A | xiv | Cambro-Silurian strata..... | 76 B | xiii |
| Seager camp, NEAR SHOAL LAKE, SEINE RIVER, R.R.D. | 154 | v | Cape Robert and Gore bay... 77 B | xiii | |
| Seagriff—? (1826) | 17 | ii | Pine lake..... | 156 | R C |
| Seaman, Prof. A. E. | | | West bay (near)..... | 79 B | xiii |
| Minor ref. to..... | 269 A | xiv | Maple lake, Michipicoten div., rocks near..... | 336 A | xiv |
| Views of, <i>re</i> rocks in Michigan copper ranges..... | 144 | ix | Marmora dist..... | 106 | R C |
| Seaman, Sleeth & Black. | 120 | ii | mill furnace..... | 50 | iii |
| Searchmont, ALG. | | | Milton brick-yard..... | 78 | R C |
| Kiln-plant at..... | 23 | xii | Mount Healey, near..... | 52 B | xiii |
| Seaver, J. | 75 | xi | Murray mine to Windy lake... With C | xiv | |
| Sebastopol tp., RENFREW CO. | | | Niagara formation, Welland canal. | 98 A | xiv |
| Amazonite in..... | 193 | ii | Nickel-bearing eruptive, hypo- thetical..... | 288, 289 | xii |
| | 193 | ix | Pyrites deposit, ideal..... | 187 A | xvi |
| Apatite in..... | 194 | ix | Sand bay, L. Superior, inland... 79 | iii | |
| mining..... | 170 | R C | Soweska river, lignite seam.... 167 A | xiii | |
| Asbestos in..... | 195 | ix | Spanish river, clay beds..... | 21 B | xv |
| Biotite and calcite in..... | 195 | ix | Thessalon (near)..... | 158 | viii |
| Boulders in, Silurian..... | 213 | vii | | | |

| | Page. | Vol. | | Page. | Vol. |
|---|-------------|--------|--|----------------|--------|
| Sections.—Con. | | | Seegmiller, N. | | |
| Topeka, Kan., showing Melan arches..... | 178 | A xiv | Report by, 1904, as Mining Agent at Kenora..... | 34 | A xiv |
| Trenton formation, Montreal.... | 97 | A xiv | Seely Bay, LEEDS TP., LEEDS CO. | | |
| Vermilion series, hypothetical.... | 124 | R C | Dike near, notes: graphite near..... | 230, 231 | vii |
| Wanapitei river, sand deposits.... | 182 | vi | Seelye, R. W. | | |
| Welland and Lambton oil fields..... | 97, 98 | A xiv | Acknowledgments to..... | 299 | A xiv |
| of mines. | | | Consulting engineer, Radnor iron mine..... | 80 | A xvi |
| Badger silver mine..... | 193 | R C | Manager, Continuity mine..... | 139 | x |
| Beaver silver mine..... | 192 | R C | Frances mine..... | 71 | xi |
| Blairton iron mine..... | 127 | R C | ..... | 63 | xii |
| Burley gold mine..... | 64, 65 | viii | Helen mine..... | 59, 60 | A xiv |
| Chandler iron mine..... | 174 | xi | ..... | 70, 138 | A xv |
| Coe Hill iron mine..... | 127 | R C | ..... | 72 | A xvi |
| Copper Cliff nickel mine..... | 259 | xii | Josephine mine..... | 47 | A xiii |
| ..... | 42 | C xiv | W. E. | | |
| Crawford's sand pit, Hamilton.... | 228 | A xiii | ..... | 26 | A xiv |
| Evans nickel mine..... | 262 | xii | Seemoe, Joe | | |
| ..... | 49 | C xiv | ..... | 198 | A xiii |
| Foley gold mine..... | 69 | vii | ..... | 68 | C xiv |
| ..... | 65 | ix | Seger, Dr. Herman | | |
| Foxton apatite mine..... | 168 | R C | Inventor of Seger cones..... | 39 | B xv |
| Gatling gold mine..... | 107 | R C | Notes and illustration of same.... | 40 | B xv |
| Goetz claim..... | 182 | A xv | Seguin river, GEORGIAN BAY, L. | | |
| Golden Star gold mine..... | 64, 65, 295 | viii | Huron..... | | |
| ..... | 69 | ix | Rocks near mouth of..... | 166 | ix |
| Helen iron mine, east of..... | 156 | ix | Striae on, direction..... | 178 | ix |
| Howland iron mine..... | 131 | R C | Seih, C. J. | | |
| Mikado gold mine..... | 53 | ix | ..... | 244 | xi |
| Murray nickel mine..... | 253 | xii | Seine bay, RAINY LAKE. | | |
| ..... | 53 | C xiv | Anorthosite on..... | 92 | iv |
| Olive gold mine..... | 73 | ix | ..... | 63, 98 | v |
| Ophir gold mine..... | 44 | iii | Beryl on..... | 237 | vii |
| ..... | 206 | iv | ..... | 195 | ix |
| Perth mica mine..... | 148 | R C | Gold mining on and near..... | 55, 58 | iv |
| Playfair iron mine..... | 139 | R C | Iron on, magnetite..... | 74 | iv |
| Quebec copper mine..... | 103 | R C | ..... | 304 | xii |
| Regina gold mine..... | 41 | vii | mining..... | 141, 266 | xi |
| ..... | 45 | ix | Minor refs. to..... | 40 | iv |
| Sawbill gold mine..... | 77 | ix | ..... | 83 | vi |
| Silver Islet silver mine..... | 196 | R C | Scenery of..... | 160 | v |
| Smith and Lacey mica mine.... | 148 | R C | Manitou Gold Mg. Co. | | |
| Stobie nickel mine..... | 264 | xii | Capital and date of charter..... | 7 | vi |
| ..... | 59 | C xiv | ..... | 12 | vii |
| Sultana gold mine..... | 39 | ix | river, RAINY LAKE. | | |
| Victoria nickel mine..... | 272, 273 | xii | See also Seine River dist. | | |
| ..... | 28, 29 | C xiv | Agricultural land along..... | 45 | iv |
| Wilbur iron mine..... | 129 | R C | ..... | 91 | v |
| Worthington nickel mine.... | 271 | xii | Character of..... | 203 | v |
| ..... | 30 | C xiv | Description of..... | 68-72, 148-154 | v |
| Security Gold Mg. and Develop- ment Co. | | | Glacial striae on..... | 89 | v |
| Capital and date of charter..... | 12 | vii | Gold on..... | 64, 118 | R C |
| Seddon, W. D. | | | See also the separate portions. | | |
| <i>Seddelophaga ruticilla</i> . See Redstart, American | 105 | vii | Iron ore on..... | 20, 22 | R C |
| Sedgwick, Prof. Adam | | | titaniferous..... | 70 | ii |
| Cambrian system named by.... | 31 | R C | Notes on, by Coleman..... | 73, 74, 77, 78 | vi |
| William | | | Photos of portions of..... | 80, 81 | v |
| Notes by, on iron ores near Gum- flint lake..... | 126, 127 | R C | ..... | 32, 33 | vi |
| ref. to..... | 66 | ii | ..... | 224, 225 | x |
| <i>Sedum latifolium</i> . See Labrador tea. | | | Portages on, cut by Govt..... | 9 | vi |
| Seebohm, Harry | | | Rocks on, anorthosite..... | 88 | iv |
| Notes by, on manufacture of cru- cible cast steel..... | 471 | R C | ..... | 226, 227 | vii |
| | | | granite, petrography..... | 96, 97 | v |
| | | | greywacké..... | 87 | iv |
| | | | Huronian..... | 18 | R C |
| | | | limestone..... | 100 | B xiii |
| | | | porphyrites..... | 81 | iv |
| | | | Surveys on, ref. to..... | 40 | iv |
| | | | Waterpower on..... | 43 | iv |
|  |  |  | ..... | 252, 253 | vii |

| | Page. | Vol. | | Page. | Vol. |
|---|----------------------------------|-------------|---|------------------|---------------|
| Seine River and Rainy Lake Exploration Co. | 129 76 | vii viii | Selwyn, Dr. Alfred—Con. | | |
| River City, SHOAL LAKE, R. R. D. | | | Views of, <i>re</i> Huronian gold mine. | 80, 123, 125 | v |
| Building of | 65 | v | Picton (N.S.) iron deposits..... | 398 | R C |
| Description of..... | 160 | v | lake, NORMAN TP., NIP. | | |
| River dist., R.R. D. | | | <i>See also</i> Whistle mine. | | |
| Gold industry in, 1894..... | 227-230 | iv | Nickel range on | 284 | xi |
| 1895..... | 62-72 | v | Shape of, conforms to strike of rocks..... | 202 A 73 C | xiii xiv |
| 1896..... | 54-56, 72-83, 266, 267 | vi | Semple, Parlan. | 26 | iii |
| 1897..... | 62-75, 123-131 | vii | Seneca Copper and Nickel Mg. Co. | | |
| 1898..... | 41, 42, 76-95, 263-274, 277, 278 | viii | Capital and date of charter | 9 | viii |
| 1899..... | 64-82 | ix | Licence to | 9 | viii |
| 1900..... | 79-85, 93-96, 103-107 | x | | 118 143 75 | ix x xi |
| 1901..... | 15, 150, 239-246 | xi | tp., HALDIMAND CO. | | |
| cheap transport for..... | 248 | vi | Gypsum in | 53 B | xiii |
| future of, notes by Blue..... | 8, 9 | v | Natural gas in. <i>See</i> Caledonia. | | |
| Iron mining in. <i>See</i> Atikokan. | | | Sentinel Consolidated Gold Mg. Co. | | |
| Map of..... | With Vol. iv | iv | Capital and date of charter | 9 | viii |
| Report on, by Coleman..... | 55-60 | iv | gold mine, LABYRINTH BAY, L. OF THE WOODS. | | |
| ref. to..... | 3, 4 | v | Notes on, 1898..... | 64 | viii |
| River Gold Mg. Co. | | | Separation lake, Nip. | | |
| <i>See also</i> Ferguson mine. | | | Description of..... | 112 A | xiii |
| Foley mine. | | | Diorites near | 119 A | xiii |
| Formation of..... | 80, 259 | vi | Minor ref. to..... | 109 A | xiii |
| River Syn. Mg. Co. | 79 | ix | Septemes, NEAR MARSEILLES, FRANCE. | | |
| Seip, G. | 105 | vii | Nickel refinery at..... | 151 | ii |
| Seitz, Michael | 117 | x | Sergeant—? | 82 A | xvi |
| <i>Sciurus northoracensis.</i> <i>See</i> Thrush, water | | | Sericite. | | |
| Selby, H. W. | 149 | xi | Definition of..... | 541 | R C |
| street, TORONTO. | | | schist. | | |
| Paving of..... | 17 | v | Seine river..... | 74 | vi |
| Selenite. | | | Sturgeon falls..... | 134 | xi |
| Definition of..... | 541 | R C | Wabigoon Lake dist..... | 183 | vii |
| Determination of..... | 222 | vi | Serpent river, L. HURON, ONT. | 119 | iv |
| French river, Moose river..... | 192 | viii | | 63 A | xiv |
| Harricanaw river..... | 158 A | xiii | Serpents. | | |
| Occurrences of..... | 208 | ix | Caribou island, L. Superior (mythical)..... | 111 | v |
| Selenium. | | | Serpentine. | | |
| Black river (near), L. Superior..... | 209 | ix | Addington co..... | 91 | iii |
| Selkirk, Lord | | | Bedford and Belmont tps..... | 209 | ix |
| Quarrel between, and Northwest Co..... | 197, 198 | v | Canada, production..... | 1886-87, 243 | R C |
| Selkirk, WALPOLE TP., HALDIMAND CO. | | | Darling tp..... | 83 | R C |
| Natural gas at..... | 108 A | xv | Description of..... | 541 | R C |
| Gas and Oil Co. | | | Determination of..... | 205 | vi |
| Capital and date of charter | 26 A | xv | Eastern Townships, Que..... | 150 C | xiv |
| Sellwood, Henry | | | Exhibit of, at World's Fair..... | 186, 189 | ii |
| Notes by, on Chandler mine, Ely..... | 126 | R C | Hardness of..... | 202 | vi |
| <i>Sciurus aurocapillus.</i> <i>See</i> Oven bird. | | | New Caledonia..... | 149 | ii |
| Selwyn, Dr. Alfred | | | | 68, 69 B | xiv |
| Average elevation of Archaean areas given by..... | 193 | v | Frederick House river..... | 178 | viii |
| Evidence by, before R.C. <i>re</i> :— | | | Hastings co..... | 91 | iii |
| geological maps..... | 423 | R C | Actinolite, Ont..... | 82 | R C |
| mining in Ontario..... | 65, 69 | R C | Marmora tp..... | 209 | ix |
| laws..... | 31 B | xiii | Huronian areas, notes by Bell..... | 81 | i |
| Ref. to surveys by, Lac Seul..... | 53 | v | Leeds tp., mining..... | 297 | xi |
| "Rice rock" of, ref. to..... | 8 C | xiv | | 13 A | xiii |
| | | | Long-point lake, near Green-water lake..... | 81 | v |
| | | | Nipigon river..... | 233 | R C |
| | | | North Burgess tp..... | 209 | ix |

| | Page. | Vol. | | Page. | Vol. |
|--|------------|------|---|----------|------|
| Serpentine. — <i>Con.</i> | | | Seymour, F. E. | | |
| Pigeon lake, Montreal lake, analysis..... | 82 B | xiii | Evidence by, before R. C..... | 389 | R C |
| Rainy River dist.— | | | ref. to..... | 323 | R C |
| Despair and Clearwater lakes. | 50, 93 | iv | Notes by, on his father's furnace. | 22 | ii |
| | 209 | ix | <i>See also</i> Seymour iron mine. | | |
| possibility of asbestos in.... | 73, 76 | iv | Uriah | | |
| Notes on, by Goodwin..... | 227 | vi | Blast furnace at Madoc built by. | 323, 324 | R C |
| Specific gravity of..... | 202 | vi | | 22, 37 | ii |
| Three A. mine, Thunder bay.... | 28 | R C | W. L. | 118 | ix |
| fibrous. <i>See</i> Actinolite. | | | | 143 | x |
| Servia. | | | | 75 | xi |
| Nickel coinage in..... | 161 | ii | iron mine, MADOC TP., HASTINGS CO. | | |
| Service-berry. | | | Exhibit from, at Buffalo..... | 86 | xi |
| Abitibi dist..... | 126 A | xiii | Minor ref. to..... | 133 | R C |
| | 241, 253 A | xiv | One of..... | 36, 38 | ii |
| Michipicoten div..... | 296 A | xiv | analysis..... | 54, 55 | ii |
| Mattagami valley..... | 150 A | xv | notes by Macfarlane.... | 39, 40 | ii |
| Moose River basin..... | 176 A | xiii | Vennor..... | 41, 42 | ii |
| Sesekimaka lake, BLANCHE RIVER, NIP. | | | Notes on, 1900..... | 129 | x |
| Notes on, by Bolton..... | 181 | xii | Rocks in..... | 54 | ii |
| Seven-mile lake, SOUTHEAST ALG. | | | Syncline in..... | 51 | ii |
| Description of..... | 167 | xii | Uran-ochre in..... | 233 | vii |
| Forest fires near..... | 168 | xii | tp., NORTHUMBERLAND CO. | | |
| (OBCUNIMAGUNK) lake, N. OF | | | Magnetite in..... | 202 | ix |
| METEOR LAKE, ALG. | | | Trenton formation in..... | 88, 89 B | xiii |
| Gold mining near..... | 156 | x | Sgoblom, W. | 56, 57 | xi |
| (OBCUNIMAGUNK) river, MATTAGAMI RIVER, ALG. | | | Shad bush. <i>See</i> Service-berry. | | |
| Description of..... | 181 | x | Shafer, F. | 49 A | xiii |
| Severance, S. | 118 | ii | Shaft island, ABITIBI LAKE, NIP. | | |
| Seymour mine, MARMORA TP. <i>See</i> | | | Gold mining on..... | 219 A | xv |
| Pearce gold-arsenic mine. | | | Shaftesbury Gold Mg. Co. | | |
| river, KEE. | | | Capital and date of charter..... | 12 | vii |
| Limestone on..... | 93 | v | Shakespeare Development Co. | | |
| river, SIMCOE CO. | | | Capital and date of charter..... | 30 A | xvi |
| Waterpower on..... | 252 | vii | gold mine, SHAKESPEARE TP., ALG. | | |
| | 14 A | xv | Accident at..... | 26-29 A | xiv |
| Seville, SPAIN. | | | Control of, vested in Dunn syndicate..... | 67, 68 A | xvi |
| Iron ores of..... | 121 | ii | Mining class at..... | 45, 46 A | xv |
| Seward, W. H. | 202 | i | Notes on, 1903..... | 70, 71 A | xiii |
| Sewell and Smith. | | | 1904..... | 57, 58 A | xiv |
| Martha mica mine worked by.... | 104 A | xv | 1905..... | 66, 67 A | xv |
| Sewer and Drain Pipe Co. | | | 1906..... | 67, 68 A | xvi |
| Output of, 1888..... | 72 | R C | Operating, 1906..... | 6 A | xvi |
| pipes. | | | Photos of..... | 64, 65 A | xiii |
| Clays for..... | 86 | R C | | 57 A | xiv |
| Companies engaged in making.. | 19 A | xvi | Gold Mg. Co. | | |
| Factories for, notes..... | 116, 117 B | xv | Capital and date of charter..... | 37 A | xiii |
| Sewing machines. | | | <i>See also</i> Shakespeare gold mine. | | |
| Canadian imports, 1881-87.... | 248, 253 | R C | tp., ALG. | | |
| Factories for, 1881..... | 116 | ii | Gold in, discovery..... | 5 A | xiii |
| Sewmilfee Iron Mining Co. | | | mining..... | 58 A | xiv |
| Iron bounties paid to, 1901..... | 26 | xi | <i>See also</i> Shakespeare | | |
| Sexsmith iron mine, MADOC TP., HASTINGS CO. | 133 | R C | g. m. | | |
| Sextant rapid, ABITIBI RIVER. | | | Shale. | | |
| Cause of..... | 117 A | xiii | Composition, distribution and | | |
| Notes on; fossils at..... | 187 | viii | origin of..... | 4-9 B | xv |
| Photo of..... | 200, 201 | viii | Thedford (Devonian)..... | 7 B | xv |
| Rocks at..... | 138 A | xiii | carbonaceous | | |
| Devonian, photo..... | 160, 161 A | xiii | Abitibi river, notes by J.M. Bell. | 159 A | xiii |
| Waterpower at..... | 193 | viii | L. of the Woods..... | 104 | vi |
| Seybold, E. | 236 | ii | for pottery. | | |
| Seymour, Alfred | | | Thedford and vicinity..... | 155, 156 | xii |
| Attempt by, to jump Silver Islet | | | | | |
| mine..... | 143-145 | vi | | | |

| | Page. | Vol. | | Page. | Vol. |
|--|----------|--------|--|--------------------|--------|
| Shaler, Prof. Nathaniel Southgate | | | Shaw, George A. | | |
| Notes by, on denudation of | | | Evidence by, before R. C. re:— | | |
| Laurentian elevations..... | 169 | i | assays, unreliability of..... | 428 | R C |
| Views of, <i>re</i> origin of apatite.... | 443 | R O | copper, Denison tp..... | 105 | R C |
| peat as fuel..... | 192 | i | gold, Graham tp..... | 112 | R C |
| production, cost..... | 202 | ii | oil as furnace fuel..... | 395 | R C |
| Shales, William J. | 251 | ii | want of cheap transport..... | 240 | R C |
| Shallow lake, KEPPEL TP., GREY CO. | | | John | 7 | A XVI |
| Cement works on..... | 17 | B xiii | Shawaskong river. <i>See</i> Madawaska river. | | |
| <i>See also</i> Owen Sound Portland Cement Co. | | | Shawinigan Carbide Co. | | |
| Marl on..... | 109 | i | Capital and date of charter..... | 9 | x |
| | 31, 32 | xii | Shea, Maurice | 165 | i |
| analysis..... | 51 | B xiv | Thomas | 54, 57 | xi |
| notes by Gillespie..... | 156 | A xiv | | 35 | A xvi |
| river, BLACK RIVER, ABITIBI RIVER. | 187 | xii | Thomas | 28 | xii |
| Shamnis island, L. OF THE WOODS, R.R.D. | | | Shear, Herbert | | |
| Felsite dike on..... | 56 | vii | Evidence by, before R. C. <i>re</i> | | |
| "Shamrock" S.S. | 59 | viii | Badger silver mine..... | 199, 200 | R C |
| Shangemequagama (SANDY-BEACH) lake, E. OF RICE LAKE, ALG. | 131 | ix | Manager, Badger mine..... | 199 | R C |
| Shangoinah island, L. SUPERIOR. | | | | 226 | i |
| Application to mine..... | 143, 144 | vi | Consolidated Mines Co. | 19 | xi |
| Shannon, C. E. | 143 | x | West End silver mine. | | |
| Edward | 57 | xii | | 96, 98 | viii |
| R. P. | 143 | x | | 258 | xi |
| Shannonville, TYENDINAGA TP., HASTINGS CO. | | | | 72 | A xiii |
| Altitude of..... | 222 | x | President, Consolidated Mines Co. | 257 | xi |
| Rocks near..... | 27 | B xiii | Sheba Gold Mg. and Develop=ment Co. | | |
| Shantz, J. Y. and Son. | | | Capital and date of charter..... | 9 | viii |
| Experiments by, on peat for fuel. | 191 | i | Shebandowan lake, TH. B. D. | | |
| Sharbot lake, OSO TP., FRONTENAC CO. | | | Beauty of..... | 203 | v |
| Charcoal burning at..... | 481 | R C | Copper mining on..... | 80 | v |
| lake, FRONTENAC CO. | | | Explorations on and near, notes | | |
| Apatite mining on, evidence before R. C. | 170, 178 | R C | by Blue..... | 117-130 | v |
| Corundum near..... | 227 | viii | Glacial striae on..... | 89 | v |
| Feldspar prospecting near..... | 83 | A xiv | Gold on and near..... | 71 | iv |
| Quartz from, result of mill test on..... | 214 | v | mining..... | 108 | x |
| Tremolite near..... | 211 | ix | | 238, 239 | xi |
| Sharon Iron Works, PA. | 75 | ii | notes by Plummer..... | 78 | v |
| Sharp, Andrew | | | Railway needed to..... | 115, 241 | R C |
| Views of, on royalties..... | 37 | i | Rocks on and near..... | 75 | v |
| Prof. | 40, 41 | A xiv | petrography..... | 95, 96 | v |
| W. | | | Route from, to Copper lake..... | 127 | v |
| Bristone quarrying by. Credit | | | Round lake. 117, 119 | | v |
| Forks..... | 111 | ix | Surveyed by Coleman..... | 3 | v |
| Wentworth | 61 | ix | Shebandowan Mining Co. | | |
| William | 122 | vii | Capital and date of charter..... | 12 | vii |
| | 59 | ix | river, SHEBANDOWAN LAKE, TH. B. D. | | |
| | 79 | x | Stratified deposits on..... | 146 | xi |
| Sharpe Lake Cobalt Silver Mg. Co. | | | Shebeshkong (CHEPAKONGE) river, GEORGIAN BAY, L. HURON. | | |
| Capital and date of charter..... | 30 | A xvi | Copper ores on..... | 261 | viii |
| Sharp=rock portage, MISSINAIBI RIVER, ALG. | 195 | viii | | 168 | ix |
| Sharps landing, WABI BAY, L. TIMISKAMING. | | | Shedden, SOUTHWOLD TP., ELGIN CO. | | |
| Rocks at, and near..... | 39, 43 | B xiv | Brick-yard in, notes on..... | 62 | B xv |
| Keewatin..... | 30 | B xiv | tp., ALG. | | |
| Shaw, Col. A. | 237 | ii | Copper mining north of..... | 62 | A xiv |
| A. W. | 143 | x | Pulp plant in. <i>See</i> Spanish Mills. | | |
| Benjamin | 56 | A xiii | Sheedy, James | 167, 175, 176, 185 | iii |
| | | | Sheek (SHRIK) island, ST. LAWRENCE RIVER, ONT. | | |
| | | | Limestone on, Chazy..... | 47 | B xiii |
| | | | dolomitic..... | 40 | B xiii |
| | | | Sheen, Hayes | 72 | A xvi |
| | | | Sheep. | | |
| | | | Mentioned as thriving at Moose | | |
| | | | Factory..... | 107 | iv |

| | Page. | Vol. | | Page. | Vol. |
|---|----------|--------|---|----------|--------|
| Sheep-dip. | | | Sheppard nickel mine. See Beatrice mine. | | |
| Arsenic used in | 111-114 | xi | Shequamka river, MICHIGICOTEN RIVER, ALG. | | |
| Sheet iron and steel. | | | Description of | 190, 191 | vii |
| Statistics of. See Iron statistics. | | | Length of | 7 Bull. | iii |
| Sheffield, J. E. See Sheffield Scientific school. | | | Shera, C. H. | 42 A | xvi |
| Sheffield, YORKSHIRE, ENGLAND. | | | W. L. | 42 A | xvi |
| Steel working at | 362 | R C | Sherbrooke, QUE. | 165 | i |
| for armour plates | 231 | vii | | 212 | vi |
| Technical school at, notes | 246, 247 | i | tp. South, LANARK CO. | | |
| scientific school, YALE COLLEGE. | | | Andesine from. analysis | 193 | ix |
| Notes on, by Mathers | 505 | R C | Anorthosite in | 226 | viii |
| Steel Works, PITTSBURG. | | | analysis | 198 | xi |
| Labour employed by, statistics | 370 | R C | Bytownite in | 227 | viii |
| tp., ADDINGTON CO. | | | Corundum in | 195 | ix |
| Dolomite in | 62 | B xiii | compared with that | 204, 205 | viii |
| analysis | 28 | B xiii | of India | 232 | viii |
| Iron ore from, at World's Fair | 82 | ii | microphoto | 216, 217 | viii |
| mining. See Tamworth. | | | Gold in | 112 | R C |
| Marlin, analysis | 28 | B xiii | | 199 | ix |
| Molybdenite mining in | 11 | A xiii | | 204 | xi |
| Stibnite in | 190 | ii | Iron in | 137 | R C |
| | 210 | ix | | 32, 33 | ii |
| Sheguindah, MANITOULIN ISLAND, L. HURON. | | | magnetite | 202 | ix |
| Oil near | 72 | A xv | mining | 50 | ii |
| Utica formation at | 87 | i | | 274 | v |
| bay, MANITOULIN ISLAND, L. HURON. | | | See also Christie lake. | | |
| Rocks on | 77 | B xiii | Silver lake. | | |
| for glass making | 94 | i | Iron pyrites in | 138 | R C |
| quartzite | 72 | i | Limestone in | 46 | ii |
| Sheldon, J. M. A. | 107 | A xiii | dolomite crystals | 198 | ix |
| and Sheldon Co. | | | Mica in | 86 | A xiv |
| Brick-drying machinery by, notes and photos | 48, 49 | B xv | See also Maberly. | | |
| Shell lake, ALG. See Esnagami lake. | | | Scapolite rocks in | 229 | viii |
| Shelter bay, RAINY LAKE, R.R.D. | | | Sheridan, James | 126 | R C |
| Granite on | 50 | iv | | 65 | ii |
| Shenango lake, S. OF NIVEN'S BASE LINE, ALG. | 136 | ix | Sherk, Daniel | 271 | vi |
| valley, PA. | | | L., Son & Co. | 25 | ix |
| Blast furnaces in | 125 | ii | Sherkston, HUMBERSTONE TP., WELAND CO. | | |
| Shenstone, Joseph N. | | | Corniferous formation at | 119 | B xiii |
| Agreement between, and Govt. for corundum lands | 249 | viii | Natural gas near | 136 | i |
| | 25 | x | supply of | 44 | xi |
| Vice-president, Canada Corundum Co. | 20 | ix | | 21, 91 | A xiv |
| | 131 | x | | 23 | A xv |
| Shepherd's purse. | | | Sherman, W. M. | 105 | viii |
| Night-hawk lake | 123 | A xiii | Act. | | |
| Sheppard, A. A. | 143 | x | Effect of, on silver mining | 181 | iii |
| | 75 | xi | Sherrett, R. C. | 139, 181 | R C |
| Forrest | | | Sherrington, LAPRAIRIE CO., QUE. | | |
| Copper prospecting by, L. Superior | 93 | R C | Peat at | 198 | ii |
| Mention made by, of Silver islet, (1845) | 195 | R C | Sherwood, Daniel | | |
| Prospecting Woods location (1846) | 127, 128 | vi | Iron smelting by, Lyndhurst (1813) | 319 | R C |
| | 67 | xii | George | | |
| G. W. | 190 | iii | Limestone quarry of, Brockville | 72, 73 | B xiii |
| Thomas | 123 | iv | Lithographic stone quarry of, Marmora tp. | 138 | iii |
| See also Beatrice nickel mine. | | | Sheshegwaning, BAYFELD SOUND, MANITOULIN ISLAND. | | |
| gold mine, WANAPIRELLAKE, NIP. | | | Niagara formation at | 78 | B xiii |
| Arkose at, notes | 138, 150 | vii | Shetland, EUPHENIA TP., LAMBTON CO. | | |
| Rocks of | 140 | vii | Oil at, boring for | 25 | v |

| | Page. | Vol. | | Page. | Vol. |
|--|-----------------|------|--|----------------|------|
| Shibaishkong island, L. HURON. | | | Shoal lake, SEINE RIVER, R.R.D.—<i>Con.</i> | | |
| Character of shores near..... | 67 | i | Description of river from, to | | |
| Limestone on..... | 93 B | xiii | Steep-rock lake..... | 68-71 | v |
| Shibaonaning bay. See Killarney bay. | | | Glacial striae near..... | 88 | v |
| Shields, H. J. | 94 | xii | Gold mining on..... | 5 Bull. i | |
| J. D. | 85 | viii | 55-57, 227-230 | iv | |
| Shilton, John | 64 | ix | 63-67 | v | |
| pyrites mine. See Northern Ontario pyrites mine. | | | 80-83, 267 | vi | |
| Shimer, Prof. Porter W. | 154, 155 | xii | 63-75 | vii | |
| 69, 70 B | xiii | | See also Foley mine. | | |
| Shininis hill. See Chaminiss hill. | | | Govt. road in..... | 34 | vii |
| Shining-tree lake, ALG.-NIP. LINE. | | | Notes on, by Blue..... | 155 | v |
| Glacial striae on..... | 81 | vi | Rocks on and near:— | | |
| 211 | x | | conglomerate..... | 160, 165 | viii |
| Gold on..... | 174, 183 | vi | notes..... | 184, 186, | ix |
| Gravel beds near..... | 210 | x | and sketch..... | 97, 98 | v |
| Iron on and near..... | 184 | vi | granite..... | 61, 89 | iv |
| 15 A | xv | | analysis..... | 101 | v |
| siderite..... | 198, 205 | x | petrography..... | 96, 97 | v |
| Jaspilite near, notes on..... | 178, 182-185 | x | greywacke, notes..... | 152 | vii |
| Rocks on and near..... | 173 | vi | Sand hills near..... | 146 | xi |
| 198 | x | | Surveys on, ref. to..... | 40 | iv |
| Ship Hole, MOOSE ISLAND, JAMES BAY. | | | Veins of, assays..... | 60 | iv |
| Depth of water at..... | 128 | iv | character..... | 52, 59, 70, 71 | iv |
| Sands, MOUTH OF MOOSE RIVER. | 129 | iv | 115, 116 | vi | |
| Shipley, Henry F. | 127, 143 | x | Lake and Seine River Mg. Co. | | |
| 75 | xi | | Capital and date of charter..... | 13 | vii |
| Shipman farm, ELIZABETHTOWN TP., LEEDS CO. | | | Lake narrows, SHOAL LAKE, L. OF THE WOODS, R.R.D. | | |
| Iron pyrites in..... | 153 A | xvi | Gold mining on. See Elphin-stone mine. | | |
| Shippagan, GLOUCESTER CO., N. B. | | | Rocks on..... | 107, 118 | vi |
| Peat bog in..... | 140, 144 | iii | Shoap, Elias | 144 | xii |
| Shirley, F. S. | 105 A | xv | 54 B | xiii | |
| L. H. | 106 | vii | Shoeburyness, KENT CO., ENGLAND. | 157 | iii |
| Shoal lake, L. OF THE WOODS DIST. | | | Shoes, Jim | 136 | viii |
| Glacial striae on..... | 88 | v | Shoo-fly lake, WANAPITEI RIVER, NIP. | | |
| Gold mining on: | | | Alluvial gold near..... | 156 | x |
| 1897..... | 49-56, 120, 121 | vii | Rocks near, notes..... | 154, 155 | x |
| 1898..... | 64-69 | viii | Shook Anderson Machine Co. | 118 | ii |
| 1899..... | 52-61 | ix | Shore island, L. OF THE WOODS, R.R.D. | 181 | v |
| 1900..... | 92, 93 | x | lines. | | |
| 1901..... | 251-254 | xi | Timagami dist., W. of Timagami lake..... | 177 | x |
| 1902..... | 94 | xii | Shores, E. Arthur | | |
| 1903..... | 61 A | xiii | Gold mining by, Sturgeon Lake dist..... | 38 | x |
| 1904..... | 47 A | xiv | Manager for U.S. Gold Mg. Co. 256 | xi | |
| 1905..... | 59 A | xv | 85 | xii | |
| notes by Coleman..... | 49, 50 | v | Short, A. | | |
| 104-108 | vi | | Mica mining by, Ferguson tp... 279 | v | |
| See also Cameron mine. | | | lake, COLEMAN TP., NIP. | | |
| Cornucopia mine. | | | Keewatin near..... | 44 B | xiv |
| Mikado mine. | | | Minor ref. to..... | 35 B | xiv |
| Rapids on, photo..... | 46 A | xv | Shortiss, Thomas | | |
| Rocks on and near..... | 70 | iv | Evidence by, before R.C. re furnace in Snowdon tp..... | 394 | R C |
| anorthosite..... | 153 | vii | refs. to..... | 326, 336 | R C |
| granite, notes by Coleman..... | 103 | v | Iron mine of, Glamorgan tp.... | 62 | ii |
| limestone, crystalline..... | 101 B | xiii | Letter to, re cost of iron making, Snowdon tp..... | 395 | R C |
| protogene area..... | 155 | vii | Shortreed, Gideon | 157 A | xiv |
| lake, NEW KLONDIKE DIST., R.R.D. | | | James | 23 | viii |
| Accident near, 1898..... | 25 | ix | Shotts, G. W. | 49 A | xiii |
| lake, NORTH EAST OF L. NIPIGON. | | | | | |
| 202 | v | | | | |
| lake, SEINE RIVER, R.R.D. | | | | | |
| Country between, and Mine Centre, notes by Blue... 135-154 | | v | | | |

| | Page. | Vol. | | Page. | Vol. |
|---|-------------------|------|---|--------------|------|
| Shovells, W. | | | Siderite. — <i>Con.</i> | | |
| Foreman, Big Master gold mine. | 245 | xi | Michigan div. | 196, 197 | x |
| | 55, 68 A | xiii | | 162-175, 183 | xi |
| | 54 A | xiv | Helen mine. | 192, 193 | x |
| | 52 A | xv | Iron lake. | 313 A | xiv |
| Shrigley, Ennis. | 167, 176 | iii | analyses. | 320 A | xiv |
| Shrike, northern | | | Nickel in. | 151 C | xiv |
| Abitibi dist. | 126 A | xiii | Notes by Goodwin. | 215 | vi |
| Shrubs. | | | Opasatika river, analysis. | 152 A | xiii |
| Michigan div. | 296 A | xiv | Penokee-Jogebie range. | 196, 197 | x |
| See also the different varieties. | | | Petrography of series. | 204, 205 | x |
| Shuler—? | 270 | v | Port Arthur dist. | 142 | xi |
| Shuniah (OR DUNCAN) silver mine, | | | McIntyre tp. | 209 | ix |
| McINTYRE TP. | | | Prospecting for, hints on. | 454 | RC |
| Fault in. | 237 | iv | Specific gravity of. | 202 | vi |
| Galena in. | 198 | ix | Siderite schist. | | |
| Notes on, by Bell. | 34 | RC | Pyrrhotite lake, analysis. | 395 A | xiv |
| McKellar. | 197, 198 | RC | Siemens, Frederick. | 367 | RC |
| Rocks in and near. | 56 B | xiv | Sir William | | |
| Animikie. | 237 | iv | Electrolytic smelting studied by. | 156 | ii |
| granite. | 67 | RC | Minor ref. to. | 367, 507 | RC |
| trap. | 32 | RC | Notes by, on technical education. | 419 | RC |
| Section of. | 198 | RC | Smelting process of. | xxi | RC |
| Sphalerite in. | 209 | ix | reduces price of steel. | 366 | RC |
| Shutt, F. T. | | | Views of, on peat fuel. | 208 | ii |
| Notes by, on an arsenical weed- | | | Sigami creek, SIGAMI LAKE, ALG. | 291 A | xvi |
| killer. | 115 | xi | lake, MICHIGOTEN DIV., ALG. | | |
| Shuttleworth, Prof. E. B. | | | Minor ref. to. | 285, 291 A | xiv |
| Analysis by, of natural gas, E. | | | Rocks in and near. | 302, 303 A | xiv |
| Tilbury tp. | 99 A | xvi | Sikojo-Berg, KOPPARBERG, SWEDEN. | | |
| J. M. | | | Analysis of cancrinite-jaggyrite- | | |
| Experiments by, on peat. | 200, 218 | xii | svenite from. | 173 | viii |
| <i>Sialia sialis.</i> See Bluebird. | | | Silas Griffin & Co. | 228 | i |
| Siamo slate. | | | Silesia, AUSTRIA. | | |
| Michigan, U.S. | 151 | ix | Corundum in. | 241 | viii |
| Sibley, Alexander H. | | | Mispickel ores in. | 38 | iv |
| Manager, Canada Lands Pur- | | | Moss-litter made in. | 212 | ii |
| chase Syn. | 69, 74 | iii | Nickel in, mode of occurrence. | 146 C | xiv |
| Part owner, Huronian gold mine. | 123 | v | Silica. See Quartz. | | |
| Silver Islet mine. | 141 | vi | Silicate brick. | | |
| Photo of. | 128, 129 | vi | Lime in manufacture of. | 3, 13 B | xiii |
| Purchase by, of Montreal Mg. | | | of copper. | | |
| Co's lands. | 195 | RC | Hints on, to prospectors. | 456 | RC |
| | 141, 144, 157 | vi | of zinc. See Calamine. | | |
| Henry S. | | | Silicon. | | |
| Notes by, on copper at Mamainse | | | Proportion of, in earth's crust. | 447 | RC |
| pt. | 129, 130 | ii | Silk. | | |
| Trustee for A. H. Sibley and a | | | Molybdenum for colouring. | 46 | xi |
| Detroit Co. | 241 | ii | Silkeborg, DENMARK. | | |
| | 146 | vi | Peat experiments at. | 211 | ii |
| cove, NEAR SILVER ISLET VIL- | | | Sill, J. T. | 54 | vi |
| LAGE, TH. B.D. | | | Silliman, J. R. | 34 | iv |
| Rocks in vicinity of. | 134 | vi | Sillimanite. | | |
| tp., TH. B.D. | | | Hastings co. | 209 | ix |
| Silver in. | See Silver islet. | | Sills=Eddy Mica Co. | | |
| Sicily, ITALY. | | | Work by, 1901. | 292 | xi |
| Sulphur from, for sulphuric acid. | 179 | RC | | 1902 | xii |
| | 199 A | xvi | Silures (TRIBE). | | |
| lands in, sale of. | 297 | RC | Silurian system named after. | 40. | RC |
| Siderite. | | | Silurian. | | |
| See also Meteorites. | | | Building-stone from. | 185 | ii |
| Annaberg, Saxony. | 61 B | xiv | Character and extent of. | 40 | RC |
| Animikie iron range. | 167 A | xv | Coal located in, by prospectors. | 203 | ii |
| Elizabethtown tp. | 209 | ix | Divisions of. | 2 | RC |
| Hardness of. | 202 | vi | | 96 A | xiv |
| Lake Superior. | 194 | ii | Huronian areas, notes by Bell. | 86 | i |
| | 209 | ix | Notes on, by Blue. | 169, 170 | i |
| Magnetic permeability of. | 324 | xii | Ontario, thickness of. | 195 | v |
| Marmora tp. | 209 | ix | | | |

| | Page. | Vol. |
|--|----------------|-------------|
| Silurian. — <i>Con.</i> | | |
| St. Joseph island, north of, contact with Huronian | 38 | iii |
| Silver, L. P. | | |
| Report by, on Animikie Iron-Range | 156-172 | A xv |
| Silver. | | |
| Canada, production, 1870, 1880 .. | 209 | R C |
| 1887 | 213 | R C |
| 1888 | 525 | R C |
| Chalanches, France | 63-65 | B xiv |
| Determination of | 204 | vi |
| Distribution of, notes by Blue .. | 176 | i |
| Evidence before R. C. | 191-201 | R C |
| Hardness of (native) | 202 | vi |
| Industry of, 1904 | 4, 5 | A xiv |
| 1905 | 8-11 | A xv |
| 1906 | 11-13 | A xvi |
| Mining of, report for : | | |
| 1891 | 225-229 | i |
| 1892 | 239-241 | ii |
| 1893 | 181, 182 | iii |
| 1894 | 237-239 | iv |
| 1898 | 50, 96-98 | viii |
| 1899 | 84, 85, 149 | ix |
| 1900 | 108 | x |
| 1901 | 256-258 | xi |
| 1902 | 96, 97 | xii |
| 1903-1906. <i>See above</i> Industry. | | |
| 1905 | 73-87 | A xv |
| retarded by duties | 217 | R C |
| Ores of, notes by Goodwin .. | 267, 268 | vi |
| Price of, 1905 | 15 | B xiv |
| fall in, effect of | 11, 55 | iii |
| 16 | | xii |
| Proportionate parts of | 201 | ix |
| Prospecting for, hints on .. | 452, 453 | R C |
| Pocks bearing, notes by Bell .. | 28, 29, 33-36 | R C |
| Royalties on, abandoned, 1868 .. | 128 | vi |
| Schneeberg, Saxony | 74 | B xiv |
| production | 89 | B xiv |
| Specific gravity of | 202 | vi |
| Statistics, 1870, 1880 | 210 | R C |
| 1881-1887 | 243 | R C |
| 1888 | 72 | R C |
| 1891 | 6 | i |
| 1892 | 10, 11 | ii |
| 1893 | 8, 10 | iii |
| 1897 | Preface | R and C vii |
| 1898 | 11, 21 | viii |
| 1899 | ix | viii |
| 13, 18 | | ix |
| 1900 | 7, 11, 12, 37 | x |
| 1901 | 8-14 | xi |
| 1902 | 12, 13, 16, 17 | xii |
| 1903 | 2, 5 | A xiii |
| 1904 | 1, 3, 5 | A xiv |
| 1905 | 1-3, 8, 10 | A xv |
| 1906 | 3-13 | A xvi |
| Symbol for | 201 | ix |
| Test for | 449 | R C |
| United States, 1887 | 213 | R C |
| 1888 | 525 | R C |
| Wright mine, L. Timiskaming, Que. | 101 | A xiii |
| Barrie tp. | 209 | ix |
| | 203 | xi |

| | | |
|---|-----------|--------|
| Silver. — <i>Con.</i> | | |
| Myers cave, Barrie tp. | 220 | v |
| Cobalt dist., discovery | 7 | A xvi |
| notes | 73-87 | A xv |
| by Gibson | 4, 5 | A xiv |
| 5-10 | | A xv |
| production, 1904 | 16 | B xiv |
| 1905 | 15 | B xiv |
| 1906 | 10 | A xvi |
| reports by Miller | 96-103 | A xiii |
| 9-54 | | B xiv |
| Pt. B | | xvi |
| Echo lake, notes by Skewes | 147 | R C |
| Goulais river | 203 | viii |
| James tp., discovery | 8, 45, 46 | A xvi |
| Lake of the Woods dist. | 64 | R C |
| Lake Superior : | | |
| Edward island | 108 | v |
| evidence before R.C. 61-63, 191-203 | | R C |
| Jackfish bay | 444 | R C |
| Mamainse pen. | 81 | iii |
| Nipigon bay | 267 | v |
| Silver islet | 209 | ix |
| 54-56 | | xiv |
| complete history | 125-158 | vi |
| production | 122 | iv |
| 208 | | v |
| 4 | | A xiv |
| Lutterworth tp. (local tradition) . | 57 | B xiii |
| Nipissing lake | 204 | R C |
| Olden tp. | 209 | ix |
| Port Arthur dist. | 83, 84 | vii |
| 56-58 | | B xiv |
| 61, 62 | | A xvi |
| Beaver mine | 208 | R C |
| evidence before R.C. 61-63, 191-203 | | R C |
| minerals associated with | 191 | ii |
| notes by Ingall | 51-58 | B xiv |
| Thunder bay, report by Coleman | | |
| man | 145-150 | ix |
| Rawdon tp. | 205 | xi |
| Sault Ste. Marie dist., evidence before R.C. | 59, 60 | R C |
| Sudbury nickel ores, percentage. | 203 | R C |
| 151, 153 | | C xiv |
| Timagami Lake dist. | 56 | R C |
| Anvil lake | 8, 45 | A xvi |
| Cross lake | 101 | A xiii |
| Bar Mg. Co. | | |
| Capital and date of charter | 26 | A xv |
| Work by, Coleman tp. | 86 | A xv |
| Bell Mining Co. | | |
| Capital and date of charter | 30 | A xvi |
| Bluff silver mine, STRANGE TP., TH.B.D. | | |
| Idle, 1892 | 240 | ii |
| Inspector's report on, 1891 | 228 | i |
| Centre Mg. Co. | | |
| Capital and date of charter | 12 | vii |
| silver mine, SILVER MT., TH.B.D. | | |
| Idle, 1892 | 240 | i |
| Prospecting in, 1891 | 229 | i |
| Rich silver in | 225 | i |
| City Mg. Co. | | |
| Capital and date of charter | 30 | A xvi |
| Cliff Mg. Co. | | |
| Capital and date of charter | 30 | A xvi |

| | Page. | Vol. |
|--|----------|------|
| Silver Creek, SAULT STE. MARIE DIST., ALG. | | |
| Silver mining near | 125 | viii |
| See also Climax silver mine. | | |
| silver mine, GILLIES TP., TH. B.D. | | |
| Controlled by Algoma Mg. Co. | 96 | xii |
| Evidence <i>re</i> , before R.C. 63, 199, 203 | | R C |
| Crown Mg. Co. | | |
| Capital and date of charter | 30 A | xvi |
| Falls silver mine, PORT ARTHUR DIST., TH. B.D. | 202 | R C |
| Five Mg. Co. | | |
| Capital and date of charter | 26 A | xv |
| Fox silver mine, NEAR WHITE-FISH LAKE, TH. B.D. | 199 | R C |
| glance. See Argentite. | | |
| Glance silver mine, STRANGE TP., TH. B.D. | | |
| Evidence <i>re</i> , before R.C. | 202 | R C |
| Gulch Mg. and Prospecting Co. | | |
| Capital and date of charter | 26 A | xv |
| harbour, THUNDER BAY, L. SUPERIOR | | |
| Rocks on, Animikie | 237 | iv |
| notes by Coleman | 149 | ix |
| Harbour silver mine. See Beck s. m. | | |
| Hill mine, PORT ARTHUR DIST., TH. B.D. | 202, 203 | R C |
| Mg. Co. | | |
| Capital and date of charter | 26 A | xv |
| Horse Shoe Cobalt Mg. Co. | | |
| Capital and date of charter | 29 A | xvi |
| islet, N. SHORE, L. SUPERIOR. | | |
| Photos of | 128, 129 | vi |
| State of, 1896 | 125 | vi |
| Islet, L. SUPERIOR. | | |
| Animikite on | 193 | ii |
| Domeykite on | 198 | ix |
| Erythrite on | 198 | ix |
| Graphite on | 124 | ix |
| Huntelite on | 200 | ix |
| Macfarlanite on | 194 | ii |
| 201 | | ix |
| Marcasite on | 203 | ix |
| Minor ref. to | 156 A | xv |
| Nicolite on | 205 | ix |
| Photos of | 128, 129 | vi |
| Rhodochrosite on | 208 | ix |
| Rocks in, diabase, petrography. | | |
| 104, 105 | | v |
| notes by Coleman | 85, 86 | v |
| 137 | | vi |
| Silver on, discovery | 139 | vi |
| 5 A | | xv |
| See also Silver Islet mine. | | |
| Size of | 142 | vi |
| Tetrahedrite in | 210 | ix |
| Veins of, true fissure | 239 | iv |
| Visited by Coleman, 1895 | 3 | v |
| Islet Consolidated Mg. and Lands Co. | | |
| Evidence <i>re</i> , before R.C. 98, 196, 197, 202 | | R C |
| Formation and work by | 73 | iii |
| 153-155 | | vi |
| Minor ref. to | 69 | iii |

| | Page. | Vol. |
|--|-------------------|------|
| Silver Islet mine, SILVER ISLET, L. SUPERIOR. | | |
| Animikie formation in | 31 | R C |
| 85 | | v |
| Annabergite in | 193 | ix |
| Assets and liabilities of, 1873 | 149 | vi |
| Cerargyrite in | 196 | ix |
| Chalcopyrite in | 86 | v |
| Cobalt bloom in | 214 | vi |
| 103 A | | xiii |
| Crib work protecting, effect of | | |
| waves on | 147 | viii |
| Diabase breccia on | 86 | v |
| Galena on | 86 | v |
| Macfarlanite on | 85 | v |
| 191 | | ii |
| Marcasite on | 86 | v |
| Minor ref. to | 101 A | xiii |
| Natural gas in | 35, 153 | R C |
| Plant of, photos | 144, 145 | vi |
| Sale of, by the Montreal Co. | 95 | R C |
| Section of | 196 | R C |
| Silver in, animikite | 191 | ii |
| 193 | | ix |
| antimonial | 194 | ix |
| argentite | 191 | ii |
| 86 | | v |
| 194 | | ix |
| discovery | 34 | R C |
| 139 | | vi |
| 5 A | | xv |
| evidence before R.C. | | |
| 62, 63, 67, 94, 195, 197 | | R C |
| forms of | 33 | R C |
| huntelite | 191 | ii |
| mining, complete his- | | |
| tory | 125-127 | vi |
| notes by Blue | 176, 177 | i |
| Ingall. | | |
| 54-56 B | | xiv |
| native | 191 | ii |
| 86 | | v |
| 207 | | vi |
| origin | 35 | R C |
| production | 196 | R C |
| 122 | | iv |
| 85, 208 | | v |
| 125 | | vi |
| 5 A | | xiii |
| 4 A | | xiv |
| 1870-75 | 142, 152 | vi |
| State of, 1876 | 152 | vi |
| Values in, poorer in depth | 6 B | xiv |
| Veins in, course of | 33, 192, 198, 203 | R C |
| Zinc-blende in | 86 | v |
| Islet Mining Co. | | |
| Financial difficulties of | 152, 153 | vi |
| Formation of | 142 | vi |
| King Gold and Copper Co. | | |
| Capital and date of charter | 24 A | xiii |
| lake, FRONTENAC AND LANARK COS. | | |
| Apatite mining on | 240 | i |
| suspended | 251 | ii |
| Iron ore on, analysis and notes | | |
| titaniferous | 48 | ii |
| 51 | | ii |
| Limestone on | 46 | ii |

| | Page. | Vol. | | Page. | Vol. |
|---|----------|--------|--|----------|--------|
| Silver lake, McTAVISH TP., TH. B. D. | | | Silverine (ARGENTAN). | | |
| Iron-bearing rocks near..... | 259 | A xiv | Composition of..... | 159, 160 | ii |
| ore from, at World's Fair.. | 80 | ii | Nickel for making..... | 155 | ii |
| Keweenaw west of..... | 169 | A xv | Silverland Development Co. | | |
| Galena in..... | 198 | ix | Capital and date of charter..... | 30 | A xvi |
| | 170 | A xv | Silvester, A. | 131 | ix |
| Laccolithic sills on..... | 171 | A xv | Simard, A. | 98 | A xvi |
| Sphalerite on..... | 209 | ix | Simcoe, Woodhouse TP., SIMCOE CO. | | |
| lake, NEAR COLBORNE, NORTH- | | | Brick-yard at, notes..... | 85 | B xv |
| UMBERLAND CO. | | | co. | | |
| Iroquois beach at..... | 231, 235 | A xiii | Brick industry in..... | 99, 100 | B xv |
| lake, NEAR SHEBANDOWAN | | | Limestone in, notes by Miller. 107-109 | B xiii | |
| LAKE, TH. B. D. | | | Peat in..... | 198, 209 | ii |
| Notes on, by Blue..... | 118 | v | island, L. ONTARIO. | | |
| Rice on..... | 121 | v | Cambro-Silurian on..... | 44 | B xiii |
| Route from, to Huronian g.n.... | 125 | v | lake. | | |
| Lake Mining Co. | | | Level of, affecting Holland River | | |
| Capital and date of charter..... | 12 | vii | peat-bog..... | 190 | i |
| Leaf Mining Co. | | | Trenton formation on..... | 41 | R C |
| Capital and date of charter..... | 30 | A xvi | | 89, 90 | B xiii |
| Leaf silver mine, COLEMAN | | | Peat Fuel Co. | | |
| TP., NIP. | | | Work by, at Barrie, suggested... 23 | ix | |
| Notes on, 1905..... | 84 | A xv | Simon hill, NEAR MICHIGCOTEN HAR- | | |
| Ledge, Ltd. | | | BOUR, ALG. | | |
| Capital and date of charter..... | 29 | A xvi | Iron formation in..... | 204 | A xv |
| Lion Mg. and Development | | | Simmons—? | 174 | ii |
| Co. | | | N..... | 118 | ix |
| Capital and date of charter..... | 30 | A xvi | | 144 | x |
| mt., LYBSTER TP., TH. B. D. | | | Simpson—? | 49 | A xvi |
| Animikie of, carrying silver.... | 225 | i | Alec. | 60 | ix |
| Evidence <i>re</i> , before R.C.... | 197, 198 | R C | Alexander | | |
| Fault in..... | 238 | iv | Director, Marmora Foundry Co., | 21 | ii |
| Fluorspar in..... | 198 | R C | C. M. | 144 | x |
| Silver in, discovery..... | 35 | R C | Daniel | 98 | x |
| | 122 | iv | | 92 | xii |
| mining, notes... 96, 97, | 275 | viii | Lady Frances | | |
| <i>See also</i> next refs. | | | Fort Frances named after..... | 40 | iv |
| Veins in, course of..... | 62, 193, | 203 | G. A. | 106 | vii |
| Mountain group of mines, | | | Sir George (H.B.C.) | | |
| TH. B. D. | | | Member of Montreal Mg. Co.... | 127 | vi |
| Veins of, character..... | 240 | R C | Minor ref. to..... | 173 | ii |
| Mountain Mg. Co. | | | | 40 | iv |
| Notes on, by Tretheway..... | 201 | R C | Notes by, on agricultural land, | | |
| <i>See also</i> East Silver Mt. mine. | | | R.R. b. | 207 | v |
| Mountain silver mine, LYB- | | | John Bell | | |
| STER TP., TH. B. D. | | | Evidence by, <i>re</i> royalties in Gt | | |
| Silver in, argentite..... | 194 | ix | Britain..... | 36 | i |
| native..... | 207 | vi | N..... | 118 | ix |
| Minor ref. to..... | 5 | A xv | | 144 | x |
| Railway to, needed..... | 240 | R C | | 75 | xi |
| plating. | | | Dr. B. M. | 32, 33 | vii |
| Works for, Thorold..... | 131 | i | T. F. | | |
| Queen silver mine, COBALT, | | | Peat dryer of, notes and dia- | | |
| NIP. | | | grams..... | 217, 218 | xii |
| <i>See also</i> Cobalt Silver Queen, Ltd. | | | island, L. SUPERIOR. | | |
| Notes on, and photo..... | 78 | A xv | Agates on..... | 192 | ix |
| Producing, 1905..... | 7 | A xv | Copper in..... | 36 | R C |
| | 8 | A xvi | Rocks of..... | 37, 67 | R C |
| "Silver Spray" (TUG), photo, 144, | 145 | vi | trap..... | 15 | v |
| Silver Star Mining Co. | | | mine, GRADAM TP., ALG. | | |
| Capital and date of charter..... | 80 | A xvi | Assay of quartz from..... | 92 | |
| sulphide. <i>See</i> Argentite. | | | Simms, W. J. | 22 | ix |
| Wonder Mg. Co. | | | Sinclair, Duncan | | |
| Capital and date of charter..... | 29 | A xvi | Evidence by, before R.C. <i>re</i> :— | | |
| Silverado Cobalt Mines, Ltd. | | | methods of drilling..... | 166 | R C |
| Capital and date of charter..... | 30 | A xvi | oil, Petrolea..... | 55 | R C |
| Silverhorn Mining Co. | | | Ref. to explorations of, 1867.... | 176 | vi |
| Capital and date of charter..... | 29 | A xvi | J. M. | 227 | i |

| | Page. | Vol. |
|--|----------|--------|
| Sinclair mt., W. OF NIGHT-HAWK LAKE. | | |
| Altitude of | 177 | vi |
| Beaver dam near..... | 178 | vi |
| Composition of | 182 | vi |
| Gold near | 183 | vi |
| Minor ref. to | 130 | ix |
| Photo of | 176, 177 | vi |
| Timber near | 176 | vi |
| Singed-Marten creek, ABITIBI RIVER. | 183 | viii |
| Singer, Nimick & Co. | | |
| Iron output of, 1893..... | 118 | ii |
| Labour employed by, statistics.. | 370 | B C |
| Sewing Machine Co. | | |
| Output of, 1893 | 119 | ii |
| Sinn, C. F. | 106 | vii |
| Sioux Indians. | | |
| Northern limit reached by..... | 58 | v |
| Lookout, NEAR PELICAN LAKE, R.R.D. | | |
| Battle fought at..... | 168 | vii |
| Minor ref. to..... | 59 | v |
| Quartz from near, assay | 180 | vii |
| Veins at, mineralized..... | 178 | vii |
| narrows, REGINA BAY, LAKE OF THE WOODS, R.R.D. | | |
| Minor ref. to..... | 91, 103 | vi |
| Rocks on..... | 100 | vi |
| Sirdar gold mine, SIRDAR PT., L. OF THE WOODS, R.R.D. | | |
| Depth of, 1899..... | 35 | ix |
| Notes in, 1899 | 56, 57 | ix |
| 1900..... | 78 | x |
| Photo of | 48, 49 | ix |
| Sirdar Gold Mining Co. | | |
| Capital and date of charter..... | 10 | ix |
| <i>See also</i> Sirdar gold mine. | | |
| pt., L. OF THE WOODS, R.R.D. | | |
| Gold mining at..... | 57 | ix |
| <i>See also</i> Sirdar gold mine. | | |
| "Sisquette" (SLOOP) | 171 | ii |
| <i>Sisyrinchium angustifolium.</i> | | |
| Abitibi dist..... | 241 | A xiv |
| Mattagami valley..... | 150 | A xv |
| <i>Sium cicutaefolium.</i> | | |
| Mattagami valley..... | 151 | A xv |
| Sivamalai hill, COIMBATORE DIST., BURMA. | | |
| Corundum in..... | 231 | viii |
| Six-and-Six (No. 3) copper-nickel mine, BLEZARD TP., NIP. | | |
| Notes on, 1899..... | 98 | ix |
| 1900..... | 123 | x |
| Sixth Meridian, R. R. D. | | |
| Geology of | 169-171 | vii |
| Sjostedt, Ernst A. | | |
| Acknowledgments to..... | 66 | xi |
| 13 B xiii | | |
| Assays of nickel ore sampled by.. | 199 | A xiii |
| Licence to..... | 118 | ix |
| 144 | | x |
| 75 | | xi |
| 67 | | xii |
| Manager, pulp mills, Sault Ste. Marie | 154 | ix |
| Notes by, on Strathcona nickel mine | 198 | A xiii |
| 67 | | C xiv |

Skates.

| | | |
|--|----------|--------|
| Imports of, to Canada, 1881-87... | 253 | R C |
| Skewes, John S. | | |
| Evidence by, before R. C. re:— | | |
| silver mining, Echo lake..... | 147 | R C |
| tariffs | 231 | R C |
| Skews, William. | 272 | v |
| Skoradite. | | |
| Middlesburg dist., Transvaal.... | 70 | B xiv |
| Skunk. | | |
| Abitibi river, south of..... | 189 | xii |
| island, LAKE OF THE WOODS. | | |
| Gold mining on. <i>See</i> Nonesuch gold mine. | | |
| islands, MISSISSAUGA RIVER, ALG. | | |
| Minor refs. to..... | 195 | viii |
| 136 | | A xiii |
| Trees and forest fires on.... | 176, 177 | A xiii |
| lake, MICHIPICOTEN DIV. | 285, 292 | A xiv |
| lake, NIVEN'S BASE LINE, ALG. | | |
| Description of | 138 | ix |
| Skutterud, NORWAY. | | |
| Cobalt ores of | 67 | B xiv |
| Skutterudite. | | |
| Norway..... | 67 | B xiv |
| Skyunner bay, WANAPITSI LAKE, NIP. | 256 | vii |
| Slag cement. | | |
| Competing with Portland cement. | vii | B xiii |
| Slagg, John. | 491 | R C |
| Slaght, Aaron | | |
| Reports by, as Inspector of Mines:— | | |
| 1891..... | 222-247 | i |
| 1892..... | 231-257 | ii |
| 1893..... | 181-199 | iii |
| 1894..... | 225-253 | iv |
| 1895..... | 261-284 | v |
| 1896..... | 247-281 | vi |
| 1897..... | 85-100 | vii |
| Reports by, on accidents at:— | | |
| Copper Cliff mine..... | 207-210 | iv |
| Ophir mine..... | 202-206 | iv |
| Slaking of lime. | | |
| <i>See also</i> Lime. | | |
| Notes on, by Miller..... | 11 | B xiii |
| Slate. | | |
| As a building stone..... | 134 | iii |
| Canada, production, 1886-87.... | 243 | R C |
| Definition of..... | 236 | vi |
| For roofing, Madoc tp..... | 87 | R C |
| 204 | | xj |
| Matabetchuan river..... | 56 | R C |
| production, | | |
| 1870-80-87..... | 210 | R C |
| New Rockland, Que..... | 87 | R C |
| Timagami lake..... | 56 | R C |
| 93, 168 | | i |
| Meaning of name..... | 72 | i |
| Paris, Ont., analysis..... | 147 | xii |
| 34 | | B xiii |
| Sudbury dist., bedding of, photo. | 272, 273 | xii |
| notes by Coleman. | 93, 133 | C xiv |
| Whitefish lake, near, Th. B. d., analysis..... | 144 | A xvi |

| | Page. | Vol. |
|--|----------|--------|
| Slate breccia. | | |
| Cobalt dist., notes by Miller..... | 102 | A xiii |
| carbonaceous. | | |
| Rainy River dist., notes..... | 152 | vii |
| conglomerate. | | |
| Definition of..... | 74 | i |
| paint. | | |
| Composition of..... | 463 | R C |
| United States, production, 1888..... | 525 | R C |
| islands, L. SUPERIOR | | |
| Geological notes on, by Coleman..... | 137, 138 | xi |
| Iron ore on..... | 23 | R C |
| hematite..... | 314 | xii |
| hematite..... | 65 | ii |
| Prospecting on..... | 95 | viii |
| 87, 88 | | x |
| rapid, MISSISSAGI RIVER, ALG. | 164 | xii |
| river, KAMINISTIKWIA RIVER, | | |
| TH. B. D. | | |
| Kalinite on..... | 200 | ix |
| Prehnite on..... | 207 | ix |
| Slater, J. | | |
| Quarrying by, at St. Marys..... | 151 | xii |
| Slawson, —? | | |
| Tin prospecting by, Michipicoten | | |
| div..... | 138 | viii |
| Sleeman, G. | 105 | viii |
| | 118 | ix |
| Slett, Ole. | 32, 33 | vii |
| Slickensides. | | |
| Origin of..... | 252 | v |
| Sligo Iron Mill. | | |
| Labour employed at, statistics. | | |
| Slimes. | | |
| Waste of gold in..... | 452 | R C |
| Sliney, J. | 106 | vii |
| Sliter, Hiel. | 13 | ii |
| Sloan, J. | 98 | A xvi |
| W. | 98 | A xvi |
| pyrites mine, ELIZABETHTOWN | | |
| TP., LEEDS CO. | | |
| Notes on, by Fraleek..... | 153 | A xvi |
| Sloat, F. J. J. | 106 | vii |
| Slocan-Kils Mg. Co. | | |
| Capital and date of charter..... | 10 | ix |
| Sly Bros. | | |
| Apatite on land of, Frontenac co. | 439 | R C |
| Smaill, William | | |
| Manager, Bullion No. 2 mine..... | 57 | ix |
| Gold Panner mine..... | 75 | x |
| Sturgeon Lake Mg. Co. | 149 | xi |
| Smaland prov., SWEDEN. | | |
| Peat in..... | 219 | ii |
| Smaltine. | | |
| Carrying arsenic..... | 101 | xi |
| Smaltite. | | |
| Bimbowrie, S. Australia..... | 70 | B xiv |
| Casey tp., Nip..... | 48 | A xv |
| Chili..... | 72 | B xiv |
| Cobalt dist..... | xi, 99 | A xiii |
| 12, 13 | | B xiv |
| Bucke tp..... | 28 | B xiv |
| Coleman tp..... | 145 | C xiv |
| 23, 48 | | A xv |
| 9 | | A xvi |
| with tetrahedrite..... | 100 | A xiii |
| Composition of..... | 98 | A xiii |

Smaltite.—Con.

| | Page. | Vol. |
|--|--------------|--------|
| Grant co., Oregon..... | 71 | B xiv |
| Gunnison co., Col., analysis..... | 71 | B xiv |
| Hardness of..... | 202 | vi |
| Hudson tp..... | 51 | B xiv |
| Ingram tp., Nip..... | 29 | B xiv |
| Joachimsthal, Bohemia..... | 61 | B xiv |
| McKim tp..... | 194 | ii |
| 214 | | vi |
| 209 | | ix |
| 59 | | B xiv |
| Madoc tp..... | 214 | vi |
| 209 | | ix |
| Middleburg dist., Transvaal..... | 70 | B xiv |
| Montreal river..... | 53 | A xvi |
| Anvil lake..... | 8 | A xvi |
| Trout lake, S. of Bay lake..... | 29 | B xiv |
| Pihuamo, Mexico..... | 71 | B xiv |
| Saxony..... | 61, 75 | B xiv |
| Specific gravity of..... | 202 | vi |
| 20 | | B xiv |
| Whiskey lake, Alg..... | 69 | A xv |
| Smart, J. S. | 117 | i |
| T. R. | 118 | ix |
| 144 | | x |
| 67 | | xii |
| 49 | | A xiii |
| Smeaton, John | | |
| Cylindrical bellows of..... | xvi, 358 | R C |
| Eddystone lighthouse built by.. | 107 | i |
| Roman cement made by, in Eng- | | |
| land..... | 118 | A xiv |
| W. F. | 56 | A xiii |
| Smeeton quarry, NEAR INGLEWOOD, | | |
| PEEL CO. | | |
| Notes on, 1899..... | 110 | ix |
| Smelters. | | |
| See also Blast furnaces and Smelt- | | |
| ing. | | |
| Building and running of, in | | |
| Ont. | | |
| evidence before R.C. . | 390-402 | R C |
| Canada, paper on..... | 13-30 | ii |
| Detroit (iron)..... | xv | R C |
| Cost of production..... | 399 | R C |
| Location of, paper by Birkinbine. | | |
| 122-128 | | ii |
| Moisie, Que. (iron)..... | 325 | xii |
| Noumea (nickel)..... | 151 | ii |
| Operations of, in Ont., 1906..... | 17 | A xvi |
| Pottsville, Pa..... | 388 | R C |
| Radnor Forges, Que..... | 191 | ii |
| St. Ignace, Mich., ores used in.. | 99 | ii |
| St. Louis, U. S., cost of produc- | | |
| tion..... | 392 | R C |
| Schneeberg, Saxony (Cobalt)... | 75 | B xiv |
| Swansea..... | 403 | R C |
| | | |
| Bancroft, proposed..... | 234 | vii |
| Bannockburn (lead)..... | 91 | A xv |
| 18 | | A xvi |
| Bruce mines, notes..... | 378, 402-404 | R C |
| Collingwood..... | 24 | xii |
| photos..... | 160, 161 | xii |
| projected..... | 17 | ix |
| 25 | | x |
| See also Cramp Steel | | |
| Co. | | |

| | Page. | Vol. |
|--------------------------------|--------------------|--------|
| Smelters.—Con. | | |
| Deseronto..... | 22 | xii |
| | 10 | A xiii |
| | 17 | A xvi |
| notes, 1898..... | 6 | viii |
| 1899..... | 15, 102 | ix |
| 1900..... | 27 | x |
| operating..... | 25 | xi |
| photos..... | Frontis. Vol. viii | |
| | 32, 33 | ix |
| proposed..... | 234 | vii |
| quality of ore used at..... | 24 | xi |
| Eldorado (copper)..... | 89 | A xv |
| photo..... | 77 | A xvi |
| Georgian bay, proposed..... | 261 | viii |
| Hamilton..... | 329 | R C |
| | 10 | A xiii |
| | 17 | A xvi |
| completed..... | 4 | v |
| description..... | 41-46 | v |
| foundation of..... | 27 | x |
| extension of..... | 22 | xii |
| inauguration of, ref to.. | 19 | xii |
| in course of erection.. | 28, 29 | iv |
| notes, 1896..... | 38 | vi |
| 1897..... | 24, 25, 97 | vii |
| 1898..... | 6 | viii |
| 1899..... | 14, 101 | ix |
| photos..... | 32, 33 | v |
| probable effect on iron | | |
| mining..... | 7 | v |
| secured for Cobalt ores. | 73 | B xiv |
| working, 1901..... | 25 | xi |
| Kingston, iron, projected..... | 32 | iv |
| | 17 | ix |
| lead..... | 175 | i |
| | 191 | ii |
| | 234 | vii |
| | 11 | A xiii |
| Madoc, lead, proposed..... | 288 | viii |
| Marmora..... | 191 | ii |
| | 204 | vi |
| cost..... | 321 | R C |
| history..... | 11-21 | ii |
| notes by Hardy..... | 321-323 | R C |
| statements before R. C. | 389 | R C |
| Midland..... | 10 | A xiii |
| | 16 | A xv |
| | 17 | A xvi |
| blown in..... | 25 | xii |
| description..... | 102 | ix |
| | 27-30 | x |
| extension..... | 22 | xii |
| notes, 1900..... | 16, 17 | ix |
| operating, 1901..... | 25 | xi |
| photos..... | 16 | ix |
| | 16, 160, 161 | x |
| suggested..... | 6 | viii |
| Normandale (1813)..... | 142 | xi |
| Port Arthur..... | 47 | A xv |
| description..... | 60, 61 | A xv |
| erection..... | 60 | A xvi |
| proposed..... | 13 | A xiv |
| Sudbury dist. | | |
| See also Canadian Copper Co. | | |
| Oxford Copper Co. | | |

Smelters.—Con.**Sudbury dist.—Con.**

| | | |
|-------------------------|-----------------|-------|
| Copper Cliff, capacity. | 435 | R C |
| for Cobalt ores. | 64, 65 | A xv |
| description.. | 378, 379 | R C |
| notes by Brown. | 65 | A xvi |
| photos. | 39, 90, 91, 108 | C xiv |
| Victoria mine, photo.. | 21 | C xiv |
| Wellington mine, salt | | |
| process..... | 378 | R C |

Smelting.

| | | |
|-----------------------------------|-----------|--------|
| Copper-nickel ores, notes by | | |
| Levat. | 154, 155 | ii |
| paper on. | 234-236 | i |
| | 216-223 | ix |
| Iron ores, notes by J. Bawden. | 474-486 | R C |
| Lime used in..... | 3, 13, 14 | B xiii |
| Ores of economic minerals in Ont. | | |
| evidence before R. C. | 388-406 | R C |
| paper by Hardy..... | 319-388 | R C |
| Salt process for (copper)..... | 403 | R C |

Smethwick, NEAR BIRMINGHAM, ENG.

| | | |
|---------------------------------|---------|------|
| Nickel refinery at, description | | |
| and diagram..... | 108-114 | viii |

Smilacina racemosa.

| | | |
|----------------------------|-----|-------|
| Mattagami valley..... | 150 | A xv |
| " stellata. | | |
| Abitibi Lake district..... | 241 | A xiv |
| " trifolia. | | |
| Abitibi Lake dist..... | 241 | A xiv |
| Mattagami valley..... | 150 | A xv |

Smiles, Thomas.....

170-174 iii

Smirlville, MOUNTAIN TP., DUNDAS**co.**

| | | |
|--------------------------------|----|--------|
| Calcareous formation near..... | 47 | B xiii |
|--------------------------------|----|--------|

Smith, A.....

49 A xiii

A. Bromley.....

52, 53 A xvi

Albert.....

88 A xv

Captain Boyd**Apatite and mica claims of, N.**

| | | | |
|-----------------|--------------------|-----|-----|
| Burgess tp..... | 53, 167, 172, 177, | 439 | R C |
|-----------------|--------------------|-----|-----|

| | | |
|----------------|-----|----|
| gypsum in..... | 199 | ix |
|----------------|-----|----|

| | | |
|-------------------|-----|----|
| magnetite in..... | 201 | ix |
|-------------------|-----|----|

| | | |
|------------|--------|-------|
| notes..... | 88, 89 | A xvi |
|------------|--------|-------|

| | | |
|---------------------------|-----|--------|
| Claim of, Eagle lake..... | 228 | A viii |
|---------------------------|-----|--------|

| | | |
|---------------------------|----------|-----|
| Evidence by, before R. C. | 170, 172 | R C |
|---------------------------|----------|-----|

| | | |
|--------------|----|-----|
| Charles..... | 37 | vii |
|--------------|----|-----|

| | | |
|------------|--|--|
| Charles E. | | |
|------------|--|--|

| | | |
|---------------------------------|----|--------|
| Mining pyrites in Madoc tp..... | 95 | A xiii |
|---------------------------------|----|--------|

| | | |
|-----------|----|-----|
| D. H..... | 92 | iii |
|-----------|----|-----|

| | | |
|-------------|--|--|
| Dryden..... | | |
|-------------|--|--|

| | | |
|---------------------------------|----|-------|
| Manager, Laurentian gold mine.. | 52 | A xiv |
|---------------------------------|----|-------|

| | | |
|--|----|------|
| | 51 | A xv |
|--|----|------|

| | | |
|-----------------|----|---|
| Moose Lake..... | 97 | x |
|-----------------|----|---|

| | | |
|------------------------|--|--|
| Twentieth Century gold | | |
|------------------------|--|--|

| | | |
|-----------|-----|----|
| mine..... | 249 | xi |
|-----------|-----|----|

| | | |
|--|----|--------|
| | 52 | A xiii |
|--|----|--------|

| | | |
|--|--------|-------|
| | 42, 51 | A xiv |
|--|--------|-------|

| | | |
|--------------------------|----|------|
| Volcanic Reef gold mine. | 51 | A xv |
|--------------------------|----|------|

| | | |
|--------|--|--|
| Edward | | |
|--------|--|--|

| | | |
|--------------------------------|-----|------|
| Mica mining by, N. Burgess tp. | 105 | A xv |
|--------------------------------|-----|------|

| | | |
|-----------|-----|---|
| G. O..... | 144 | x |
|-----------|-----|---|

| | | |
|------------------------|--|--|
| George (FRONTENAC CO.) | | |
|------------------------|--|--|

| | | |
|--------------------------------|-----|---|
| Boring for oil on land of..... | 283 | v |
|--------------------------------|-----|---|

| | | |
|----------------------------------|----|---|
| Feldspar mining by, Bedford tp.. | 26 | x |
|----------------------------------|----|---|

| | | |
|----------------------------|----|------|
| George (HASTINGS CO.)..... | 42 | A xv |
|----------------------------|----|------|

| | | |
|----------------|--|--|
| George Gregory | | |
|----------------|--|--|

| | | |
|------------------------------------|----|--------|
| Notes by, on lignite as a fuel.... | 28 | A xiii |
|------------------------------------|----|--------|

| | Page. | Vol. |
|--|----------|--------|
| Smith, George T. | 38 | A xv |
| | 36, 37 | A xvi |
| H. B. | 110 | ix |
| H. L. | 100 | x |
| Harrison | | |
| Method of eliminating moisture | | |
| in natural gas | 106 | ix |
| Henry | 39 | A xv |
| Isaiah <i>See</i> Smith and Lacey | | |
| mica mine. | | |
| J. | 94 | A xvi |
| J. Burley | | |
| Contractor, La Mascotte gold | | |
| mine | 45 | vii |
| Gold mining by, L. of the Woods. | 100 | vi |
| Manager, Burley gold mine | 42 | ix |
| | 60 | A xiii |
| Yum Yum gold mine. | 49, 120 | vii |
| Notes by, on Yum Yum gold mine. | 50 | vii |
| J. L. | | |
| Quoted <i>re</i> amazon-stone, Color- | | |
| ado | 236, 238 | vii |
| J. Lionel | | |
| Ref. to report by on Canadian | | |
| salt | 184 | R C |
| J. Scott | 73 | viii |
| James E. | 95 | viii |
| John | 204 | iv |
| John C. | 235 | ii |
| John H. | 52, 53 | xii |
| | 12 | A xiii |
| Justin E. | 236 | xi |
| L. P. | 127 | xi |
| M. | | |
| Reference to paper by, on mag- | | |
| netic separation of ores | 340 | xii |
| N. G. Maitland | 48 | ix |
| Oscar R. | | |
| In charge of Government drill, | | |
| 1900 | 6, 54 | x |
| 1901 | 60 | xi |
| Manager, Sirdar gold mine | 56 | ix |
| Patrick | 78 | |
| Oil on farm of, Mersea tp. | 90 | A xiv |
| Peter | 23 | viii |
| R. H. | | |
| Foreman, Lacey mica mine | 287 | xi |
| Mining by, Michipicoten div. | 106 | vii |
| | 118 | ix |
| | 144 | x |
| | 75 | xi |
| S. N. | 73 | A xiii |
| Swire | 491 | R C |
| T. E. | 58, 67 | viii |
| | 280 | xi |
| T. Guildford | 17 | ix |
| | 30 | x |
| T. J. | | |
| Manager, Baby mica mine | 279 | v |
| Martha " | 133 | xi |
| | 129 | xii |
| | 105 | A xv |
| Munslow " | 290 | A xi |
| Pike Lake " | 277 | v |
| Terry | | |
| Mica mining by, N. Burgess tp. | 89 | A xvi |
| W. A. | 22 | A xiii |

Smith, W. H. Chatterton

| | Page. | Vol. |
|--|----------------------|--------|
| Jasper reported by, Hunter island. | 200 | x |
| Ref. to surveys by, R. R. d. 151, | 153 | vii |
| Atikokan river | 142 | v |
| Hunter island | 47 | iv |
| | 128 | xi |
| W. N. | 270 | A xiv |
| | 156 | A xv |
| Report by, 1905, on Loon Lake | | |
| (Alg.) iron-bearing dist. | 254-260 | xiv |
| Extract from | 158 | A xv |
| William | | |
| Foreman, Garland gypsum mine. | 243 | i |
| | 253 | ii |
| Gypsum mining by, near Cale- | | |
| donia | 23 | x |
| | 38 | xii |
| and Colfax. | | |
| Brick-yard of, Drew | 105 | B xv |
| and Crang. | | |
| Brick making by, Carlton West. . | 107 | B xv |
| and Lacy mica mine, LOUGH- | | |
| BOROUGH TP., FRONTENAC CO. | | |
| Datolite in | 197 | ix |
| Description of, and sections. | 148, 149 | R C |
| Evidence <i>re</i> , before R. C. | 149, 171 | R C |
| Notes on, 1891 | 244 | i |
| | 1892 | ii |
| | 1893 | iii |
| | 1900 | x |
| | 1901 | xi |
| | 1902 | xii |
| | 1903 | xiii |
| | 1904 | xiv |
| | 1905 | xv |
| | 1906 and photo. | xvi |
| Operating, 1906 | 23 | xvi |
| Plant of, photo | 84 | A xv |
| Purchased by Webster and Co. | 195 | iii |
| and Nelson. | | |
| Dynamite manufactured by | 152 | A xvi |
| bay, MANITOULIN ISLAND, ALG. | | |
| Rocks in vicinity of | 86 | i |
| cape, MANITOULIN ISLAND, | | |
| ALG. | 87 | i |
| co., TEXAS. | | |
| Iron ore in | 101 | ii |
| Farm, DENWICH TP., ELGIN CO. | | |
| Oil production from, 1898 | 16 | viii |
| mica mine, N. BURGESS TP. | | |
| <i>See</i> Smith, Captain Boyd | | |
| tp., PETERBOROUGH CO. | | |
| Limestone in, analysis | 97, 98 | B xiii |
| Falls, N. ELMISLEY TP., LANARK | | |
| co. | | |
| Artesian well in | 59 | i |
| Brick-yard at, notes | 76 | B xv |
| Calcareous formation in | 70 | B xiii |
| Fossils from | 224 | x |
| Notes by Coleman | 216, 217 | x |
| Iron works at | 329 | R C |
| Kame-like deposits near | 241 | A xiii |
| Mica trimming works at | 105 | A xv |
| Sulphuric acid works at | 193, 200 | A xvi |
| Superphosphate works at | 169, 179 | R C |
| | 252 | ii |
| | 33 | vi |

| | Page. | Vol. | | Page. | Vol. |
|---|--------------------|--------|--|------------|--------|
| Smithsonian Institution. | | | Snider tp.—Con. | | |
| Work by, <i>re</i> fish, Seine River | | | Nickel in | 105 | R C |
| dist. | 63 | v | mining | 72 | A xiv |
| Smithsonite (CARBONATE OF ZINC). | | | <i>See also</i> Creighton m. | | |
| Baleo, Cal. | 71 | B xiv | North Star m. | | |
| Hints on, to prospectors | 460 | R C | Tam O'Shanter m. | | |
| Notes on, by Goodwin | 210 | vi | Rocks in | 242 | xii |
| Smoking falls, MATTAGAMI RIVER, | | | diorite | 434 | R C |
| ALG. | | | granite | 55 | C xiv |
| Water-power of | 145 | A xiii | greenstone | 50 | C xiv |
| Smoky City Boiler Works. | 118 | ii | nickel-bearing | 40 | C xiv |
| Smoothrock (CLEAR) lake, S. of | | | norite | 242 | xii |
| MANITOU LAKE, R.R.d. | | | syenite | 433 | R C |
| Granite on | 50 | iv | Snooks pyrites mine, LOUGHBOR- | | |
| portage, MATTAGAMI RIVER, | | | OUGH TP., FRONTENAC CO. | | |
| ALG. | 123 | A x | Notes on, by Fraleek | 163 | A xvi |
| Smudges. | | | Snow, Moses | | |
| Cause of forest fires | 311 | R C | Evidence by, <i>re</i> marble, Garden | | |
| Smyth, Prof. C. H. | | | River | 83, 235 | R C |
| Ref. to surveys by, Steep-rock | | | -bird, black (<i>Junco hiemalis</i>). | | |
| lake | 158 | vii | Abitibi dist. | 243 | A xiv |
| | 306 | xii | road, ARLINGTON CO., ONT. | | |
| Smyth, Prof. Henry Lloyd | | | Rocks on | 224, 225 | viii |
| Magnetic surveying for iron re- | | | Snowdon iron mine, SNOWDON TP., | | |
| commended by | 279 | A xiv | HALIBURTON CO. | | |
| Notes by, on iron ore, Atikokan | | | Iron from, cost of production. | | |
| range | 75, 76 | ii | | 395, 396 | R C |
| rocks of Steep-rock | | | | 112 | ii |
| lake | 71 | v | Notes on, by Ledyard | 114, 115 | ii |
| Ref. to surveys by, R. R. d. 151, 152 | | vii | Iron Mfg. and Blast Furnace | | |
| 129, 130, 133 | | xi | Co. | | |
| Smyth, Prof. Warrington | | | Capital and date of charter | 12 | vii |
| cape, MANITOULIN ISLAND, L. | | | tp., HALIBURTON CO. | | |
| HURON | 96 | iii | Grenville series in | 56 | B xiii |
| Bituminous shales at | 72 | A xv | Iron in, analysis | 60, 80, 81 | ii |
| Rocks at | 77 | B xiii | | 202 | ix |
| Smythe, Dr. E. H. | | | exhibited at Chicago. 79, 81 | | ii |
| Mica mining by, Bedford tp. | 133 | x | Iron ore, limonite | 191 | ii |
| Snake bay, WHITEFISH BAY, L. OF | | | mining | 234 | R C |
| THE WOODS, R. R. D. | | | evidence before | | |
| Floating island in | 109 | vi | R. C. | 130-132 | R C |
| Notes on, by Coleman | 102 | vi | | 60, 61 | ii |
| Rocks on | 113 | vii | smelter | 334, 336 | R C |
| creek, OTTAWA RIVER, QUE. | | | <i>See also</i> Kin- | | |
| Cyanite from | 237 | vii | mount. | | |
| lake, NEAR TIMAGAMI LAKE, N.P. | | | Marble in | 83 | R C |
| Iron ore near | 201 | x | | 57 | B xiii |
| Jaspillite on | 167, 168, 173 | x | Uraconite in | 194 | ii |
| photo | 176, 177 | x | | 233 | vii |
| River Mfg. Co. | | | | 211 | ix |
| Capital and date of charter | 9 | viii | Snyder, F. T. | | |
| Snarum, NORWAY. | | | Manager, Keewatin Power Co. | 53 | vi |
| Cobalt ores of | 67 | B xiv | Reduction | | |
| Snell, Rendol. | 90 | xi | Works | 60, 62 | vii |
| W. M. | 118 | ix | | 99 | viii |
| Snelus, George J. | | | Soap. | | |
| Notes by, on Saniter process | 94, 95 | ii | Lime used in | 3, 13 | B xiii |
| Snider, E. B. W. | 118 | ix | Soapstone. <i>See</i> Steatite. | | |
| I. N. | 100 | x | Sobatchia mts., NOVGOROD PROV., | | |
| Nicholas | 54, 55 | iii | RUSSIA. | 213 | vii |
| tp., SUDBURY DIST., ALG. | | | Societe d'Exploitation des Mines | | |
| Copper in | 24 | R C | de Nickel. | | |
| associated with diorite | 434 | R C | Nickel mining by, New Caledonia. 178 | | iv |
| evidence before R. C. | 103, 105, 106, 425 | R C | Le Nickel. | | |
| Gold and silver in | 112 | R C | Capital of | 175 | C xiv |
| 25 M.I. | | | | | |

| | Page. | Vol. | | Page. | Vol. |
|--|-----------------------|--------|---|------------|------|
| Societe Le Nickel.—<i>Con.</i> | | | Solenhofen, BAVARIA. | | |
| Nickel alloy of, analysis..... | 184 | iv | Lithographic stone at | 6 B | xiii |
| mining by, New Caledonia..... | 178, 22 | iv | analysis | 182 | ii |
| | | xi | specific gravity | 184 | ii |
| Not included in International Nickel Co..... | 22 | xi | Solid Comfort, HUMBERSTONE TP., WELLAND CO. | | |
| Rothschilds associated with..... | 182 | iv | Gas at, from Port Colborne..... | 128 | i |
| Miniere Caledonienne. | | | Solidago. | | |
| Inclusion of, in International Nickel Co..... | 22 | xi | Moose River basin | 177 A | xiii |
| | 140, 172 | c xiv | " <i>rugosa</i> | | |
| Socrates corundum mine, N. CAROLINA. | 225 | vii | Abitibi Lake dist..... | 241 A | xiv |
| | | | " <i>uliginosa</i> | | |
| Soda. | | | Abitibi Lake dist..... | 241 A | xiv |
| See also Alkali works. | | | Solignac, G. | 499 | R C |
| Composition of | 448 | R C | Solliday and Grandon. | | |
| Lime used for making..... | 3, 13, 14 | B xiii | Mica mining by, Loughboro tp. | 103 A | xv |
| Sodalite. | | | Solomon, King | | |
| Associated with corundum, Eastern Ont..... | 211 | vii | Brass casting for temple of..... | 381 | R C |
| | 218 | viii | Solvsbergites. | | |
| | 209 | ix | Essex co., Mass. | 190 | ix |
| Baneroft (near), mining..... | 106 A | xv | Solway Process Co. | | |
| | 26 A | xvi | Work by, notes on..... | 42 B | xiii |
| Composition of | 106 A | xv | Sombra Oil and Gas Co. | | |
| Dungannon tp..... | 188 | ii | Capital and date of charter..... | 29 A | xvi |
| | 209 | ix | tp., LAMBTON CO. | | |
| Notes on, by Goodwin..... | 225 | vi | Boring in, for coal..... | 45 A | xiii |
| Production of, 1906..... | 4, 6 A | xvi | Corniferous formation in. See | | |
| Proportion of, in earth's crust... | 447 | R C | Port Lambton..... | 47 | R C |
| Uses of..... | 106 A | xv | Somerville tp., VICTORIA CO. | | |
| Sodium arsenate. | | | Black River formation in. See | | |
| Composition and uses of | 113 | xi | Burnt River. | | |
| chloride. See Salt. | | | Galena in..... | 198 | ix |
| Sodus, U. S. | | | Graphite in. See Kilmount. | | |
| Troquois beach at | 233 A | xiii | Trenton formation in | 112 B | xiii |
| Soho Iron and Steel Co. | | | analysis | 113, 114 B | xiii |
| Labour employed by, statistics... | 370 | R C | Somme river, FRANCE. | | |
| Pipe Mill, PITTSBURG. | | | Peat in valley of, duration of formation | 183 | i |
| Labour employed at, statistics... | 370 | R C | Sommers, Capt. | 38 A | xiv |
| works, SHEFFIELD, ENG. See Jessop & Sons, William | | | Soo, The. See Sault Ste. Marie. | | |
| Soil. | | | Cobalt Mining Co. | | |
| See also Agricultural land. | | | Capital and date of charter..... | 30 A | xvi |
| Abitibi dist..... | 196-207, 249, 253 | A xiv | Soo Mining and Exploring Co. | | |
| | 125-127 | A xv | Capital and date of charter | 13 | vii |
| Abitibi river | 192 | viii | Sophia (DIAMOND) gold mine, MADCOC TP., HASTINGS CO. | | |
| Black river..... | 188 | xii | Arsenical ores of | 102 | xi |
| notes..... | 130-134 | A xiii | ref. to | 288 | viii |
| | 243-245 | A xiv | Closed down, 1901..... | 236 | xi |
| report by Henderson..... | 214-218 | A xiv | Notes on, 1897..... | 92, 93 | vii |
| Jarvis..... | 121-134 | A xiii | 1898 | 41 | viii |
| Atikokan river..... | 144 | v | 1900 | 117 | x |
| English River dist..... | 174 | vii | 1901 | 200 | xi |
| Kenogami valley..... | 112 | iv | Sore lake. See Macaming lake. | | |
| Mattagami valley..... | 188-195 | A xiv | Sorensen, Martin. | 78 A | xiii |
| | 120-122, 127, 136-146 | A xv | Soudan, E. D. | 54 A | xiv |
| analyses | 151-153 | A xv | Souesite. | | |
| Michipicoten div | 296, 297 | A xiv | Lillooet, B.C..... | 151 C | xiv |
| Moose River basin | 175, 176 | A xiii | Soulier, A. | 105 | viii |
| Sudbury dist., notes by Coleman. | 105, 106 | C xiv | Souris coal-field, SASK. | | |
| | 161 | x | Tertiary lignite of..... | 161 A | xiii |
| Timagami dist..... | 175 | vii | South Africa. | | |
| Wabigoon Lake dist..... | | | See also Transvaal. | | |
| Solar Iron Works, PITTSBURG. | | | Cobalt in | 70 B | xiv |
| Labour employed at, statistics... | 370 | R C | Diamonds in | 122, 123 | ix |
| | | | | 93 A | xiv |
| | | | Gold mining in, absence of alluvial | 72 | iv |

| | Page. | Vol. | | Page. | Vol. |
|---|---------------|------|--|------------|------|
| South Africa.—(con.) | | | South Twin island, EAGLE LAKE, R. | | |
| Prospecting in, with Govt. drills. | 166 | iii | R. D. | | |
| Skoradite in | 70 B | xiv | Gold mining on and near | 95, 96 | x |
| African General Dev. Syn. | | | Western Oil and Gas Lands. | | |
| Purchase by, of Mikado mine | 256 | vi | Working in Raleigh tp. | 104 A | xvi |
| African General Exploration and Mg. Co. | | | Southam, William | 46 | v |
| Belmont gold mine worked by | 224 | i | Southampton, SAUGEEN TP., BRUCE CO. | | |
| | 192 | ii | Boring at, for salt | 55 | RC |
| America. | | | Southeast-bend brook, MATTAGAMI RIVER, ALG. | 129 | ix |
| Copper production of, 1880-87 | 371 | RC | Southern Belle Cobalt Silver Mg. Co. | | |
| American Petroleum Co. | | | Capital and date of charter | 30 A | xvi |
| Capital and date of charter | 30 A | xvi | Ontario Peat Co. | 9 | x |
| Australia. | | | Southwold tp., ELGIN CO. | | |
| Cobalt ore in | 70 B | xiv | Brick-yard in. <i>See</i> Shedden. | | |
| Mining laws of, notes by R.C. | 294-296 | RC | Southworth, Hubert. | 184 A | xiv |
| bay, MANITOULIN ISLAND, L. HURON. | | | Sovereign Cobalt Mg. Co. | | |
| Niagara formation on. | 78 B | xiii | Exhibits of, at Buffalo | 25 A | xv |
| bay, NIPIGON LAKE, TH. B. D. | | | (LATE FEIGLE) gold mine, | | |
| Canoeing in, dangerous | 107 A | xvi | MARMORA TP., HASTINGS CO. | | |
| Trading post at | 106 A | xvi | Mispickel in | 102 | xi |
| photos | 125, 133 A | xvi | Notes on, 1903 | 93 A | xiii |
| bay, NIPISSING LAKE, P. S. D. | | | Shut down, 1901 | 198 | xi |
| Limestone on | 94 B | xiii | Gold Mg. and Development Corporation. | | |
| bay, STONY LAKE, PETERBORO CO. | | | Capital and date of charter | 12 | vii |
| Rocks on | 212 | viii | Work by, 1903 | 93 A | xiii |
| bay, WANAPITEI LAKE, NIP. | | | Oil Co. | | |
| Rocks on | 82 | i | Capital and date of charter | 24 A | xiii |
| | 83 B | xiii | Operating at Comber | 117 A | xiv |
| Bay Oil Co. | | | Soweska lake, SOWESKA RIVER, ALG. | | |
| Capital and date of charter | 26 A | xv | Kaolinic clays on | xii A | xiii |
| Work by, Pelee island | 43 B | xiii | river, MISSINAIBI RIVER, ALG. | | |
| Bay post, L. NIPIGON, TH. B. D. | | | Description of | 136 A | xiii |
| | 107 A | xvi | Forest fires on | 177 A | xiii |
| Bend, Inn. | | | Lignite on, analysis | 175 A | xiii |
| Peat plant at | 28 A | xiii | photos | 160, 161 A | xiii |
| Burgess. <i>See</i> Burgess tp. | | | report by J. T. Bell. | 164-168 A | xiii |
| Canonto tp. <i>See</i> Canonto tps. | | | section | 167 A | xiii |
| Carolina, U.S. | | | sketch map showing. | 163, 165 A | xiii |
| Apatite of | 176, 180, 441 | RC | Post-glacial sediments along | 143 A | xiii |
| Mining laws of | 14 | i | Timbered land along | 146 A | xiii |
| notes by R.C. | 283 | RC | Sowman, George | 226 | i |
| Crosby tp. <i>See</i> Crosby tps. | | | Spain. | | |
| Dakota, U.S. | | | Apatite deposits in | 441 | RC |
| Agricultural land in, cause of | 202 | v | Arsenic in | 101 | xi |
| Columbite in, with tin, beryl and feldspar | 236, 237 | vii | production, 1895-99 | 110 | xi |
| Gypsum in | 119 | RC | Cobalt production of, 1896-97 | 70 B | xiv |
| Mining laws of, notes by R.C. | 280 | RC | Copper mines in, notes | 371 | RC |
| statistics in, notes by Butterfield | 424 | RC | <i>See also</i> Rio Tinto | | |
| Dumfries tp. <i>See</i> Dumfries tp. | | | Iron ore in, exports to Great Britain | xx | RC |
| Essex Oil and Gas Co. | | | | 121 | ii |
| Capital and date of charter | 24 A | xiii | production, 1885. | 224 | RC |
| Well o, near Leamington | 116 A | xiv | pyrites in | 172, 192 A | xvi |
| lake, IGNACE DIST., R. R. D. | | | prices | 184, 185 A | xvi |
| Iron ore on | 144 | RC | Mineral lands in, laws re | 25, 26 | i |
| Moose river. <i>See</i> Mattagami river. | | | laws of | 299 | RC |
| Mountain, MOUNTAIN TP., DUNDAS CO. | | | Royalties in | 21, 25-30 | i |
| Limestone at, Calcareous | 47 B | xiii | War of, with U. S. affects mining. | 101 | viii |
| quarries | 40 B | xiii | Spang, Chalfant & Co. | | |
| Sherbrooke tp. <i>See</i> Sherbrooke tp., South. | | | Wages paid by, statistics | 370 | RC |
| | | | Spanish forks, SPANISH RIVER, ALG. | | |
| | | | Granites west of | 68 | i |

| | Page. | Vol. |
|---|--------------|------|
| Spanish Mills (LATE SPANISH RIVER), SHEDDEN TP., ALG. | | |
| Sulphite pulp plant at..... | 199 A | xvi |
| River. See Spanish Mills. | | |
| river, GEORGIAN BAY, L. HURON. | | |
| Beaches on | 185 | x |
| Clay on, photos | 21-24 B | xv |
| Distance from, to James bay.... | 192 | v |
| Forest fires on | 140 | ix |
| Gravel beds north of..... | 210 | x |
| Minor ref. to | 202 | v |
| Notes on, by Parks | 124, 125 | ix |
| Rocks on and near:— | | |
| arkose | 74 | i |
| clay-slates | 73 | i |
| crystalline schists..... | 71, 80 | i |
| granite | 69 | i |
| Huronian..... | 65 | R C |
| quartzite | 72 | i |
| slate for roofing..... | 93 | i |
| Timber on, lumbering..... | 119 | iv |
| pine | 141 | ix |
| Rutile near mouth of..... | 208 | ix |
| Waterpower on | 252 | vii |
| | 10, 69 A | xiv |
| | 13, 62, 63 A | xv |
| for Canadian Copper Co.... | 141 C | xiv |
| See also Webbwood falls. | | |
| River Nickel Mg. Co. | | |
| Work by, 1896..... | 278 | vi |
| River Pulp and Paper Co. | | |
| Mills of, photo..... | 22 B | xv |
| Saugen clay on, notes and photos. | 22-24 B | xv |
| Work by, 1905..... | 13 A | xv |
| River Talc and Nickel Mg. Co. | | |
| Capital and date of charter..... | 12 | vii |
| Spar island, L. SUPERIOR. | | |
| See also Prince copper-silver mine. | | |
| Apophyllite in..... | 194 | ix |
| Copper in, native | 197 | ix |
| Licence to explore | 255 | R C |
| Metallie minerals in..... | 56 B | xiv |
| manganese See Rhodochro- | | |
| site. | | |
| paint. See Barytes. | | |
| Sparkjer, DENMARK. | | |
| Peat manufacture in, notes on .. | 198 | xii |
| Sparling, Francis, George and Mrs. L. | | |
| Salt manufacturers. See Gray, | | |
| Young and Sparling Co. | | |
| Sparrow, chipping | | |
| Abitibi dist | 126 A | xiii |
| house | | |
| Abitibi dist | 126 A | xiii |
| vesper | | |
| Abitibi dist..... | 126 A | xiii |
| white-throated | | |
| Abitibi dist..... | 126 A | xiii |
| Sparry manganese. See Rhodochro- | | |
| site. | | |
| Spathic iron. See Siderite. | | |
| Spawn inlet, RAINY LAKE, R. R. D. | | |
| Granite on | 50 | iv |
| Spears, Malcolm | 46, 48 | xii |
| Specht, A. M. | 144 | x |

Specific gravity.

| | Page. | Vol. |
|--------------------------------|---------|------|
| Columbite | 235 | vii |
| Description of | 542 | a c |
| How to find | 448 | R C |
| Lithographic stone..... | 184 | ii |
| Niccolite | 20 B | xiv |
| Nickel carbonyl..... | 107 | viii |
| Smaltite | 20 B | xiv |
| Sperrylite | 190 | ii |
| Various minerals, list of..... | 201-203 | vi |

Speckled Trout lake, CAPREOL TP.,
NIP.

| | | |
|----------------------------|-----|-----|
| Minor ref. to..... | 273 | xii |
| Nickel range crossing..... | 284 | xi |

Spectacle lake, N. CROSBY TP., LAN-
ARK CO.

| | | |
|------------------|--------|----|
| Iron ore on..... | 44, 49 | ii |
|------------------|--------|----|

lake, BLANCHE RIVER REG.,
NIP.

| | | |
|----------------------|-----|----|
| Nomenclature of..... | 222 | xi |
|----------------------|-----|----|

Specular iron ore.

See also Hematite.

| | | |
|-----------------------------------|----------|-----|
| Burgess tp., N., with apatite.... | 440 | R C |
| Composition of | 454 | R C |
| Darling tp..... | 58 | ii |
| analysis | 141 | R C |
| Determination of | 204, 215 | vi |
| Echo lake..... | 64 | ii |
| Iron island, L. Nipissing..... | 63 | ii |
| Montreal river..... | 142 | R C |
| Timiskaming lake | 142 | R C |
| Wallace mine, Georgian bay.... | 63 | ii |

Specularite.

| | | |
|------------------|------------|-----|
| Larder lake..... | 214, 215 A | xvi |
|------------------|------------|-----|

Speculation in mining lands.

| | | |
|------------------------|-----|-----|
| Baneful effect of..... | 260 | R C |
|------------------------|-----|-----|

See also Mining booms.

Spedding, William James..... 27 ix**Speed river, WATERLOO CO.**

See also Guelph.

| | | |
|---------------------------|-------|------|
| Rocks on..... | 115 B | xiii |
| limestone, analysis | 122 B | xiii |

Speer & Sons, A...... 119 ii**Speight, T. B.**

| | | |
|-------------------------|-----|-----|
| Acknowledgments to..... | 189 | xii |
|-------------------------|-----|-----|

Refs. to surveys by:—

| | | |
|---------------------------|---------------|------|
| Abitibi dist..... | 240 A | xiv |
| L. of the Woods dist..... | 42 A | xiv |
| Minnitaki lake..... | 172 | vii |
| Timiskaming dist..... | 39 A | xvi |
| Work by, 1897 | 197, 199, 201 | viii |
| 1902 | 5, 173 | xii |
| 1904 | 248-251 A | xiv |
| 1905 | 116 A | xv |

Speller, Frank N.

| | | |
|-------------------------------|-----|-----|
| Analysis by, of diorite, Port | | |
| Coldwell | 148 | vii |

| | | |
|----------------------------|---|---|
| Appointment of, 1900 | 7 | x |
|----------------------------|---|---|

| | | |
|----------------------------------|-------|---|
| Paper by, on Metallurgical In- | | |
| dustries at Sault Ste. Marie.... | 61-68 | x |

| | | |
|------------------------------|-------|----|
| Report by, on Ontario at the | | |
| Pan-American Exhibition..... | 83-90 | xi |

| | | |
|--------------------|---|----|
| Work by, 1901..... | 7 | xi |
|--------------------|---|----|

Spence, J. (H. B. C.)..... 139, 142 ix

| | | |
|---------------------|-------|------|
| Beneth | 135 A | xiii |
|---------------------|-------|------|

Bros.

| | | |
|---------------------------------|-----|------|
| Trap quarrying by, Bruce Mines. | 125 | viii |
|---------------------------------|-----|------|

| | | |
|--|----|-----|
| | 28 | xii |
|--|----|-----|

| | Page. | Vol. | | Page. | Vol. |
|--------------------------------------|----------|--------|--|----------|--------|
| Spence furnace. | | | <i>Sphyrapicus varius.</i> See Sapsucker, | | |
| For pyrites ores, notes..... | 194 | A xvi | yellow-bellied | | |
| Spencer, C. H. | | | Spider lake, PARRY SD. DIST. | | |
| Bismuthinite found by, Barrie tp. | 234 | vii | Copper on..... | 115, 116 | xii |
| D..... | 144 | x | | 93, 94 | A xiii |
| | 75 | xi | Spider Lake Mg. Co. | | |
| D. J. W. | | | Exhibits of, at Buffalo..... | 25 | A xv |
| Altitudes of Iroquois beach given | | | Spiegeleisen. | | |
| by..... | 177 | ix | A variety of ferro-manganese.... | 462 | R C |
| | 230 | A xiii | Spignet. | | |
| given by, erroneous.. | 231 | A xiii | Montreal river and tribs., L. | | |
| Minor refs. to..... | 152 | viii | Superior..... | 200 | viii |
| | 176 | ix | Spikes. | | |
| Views of, erroneous..... | 234 | A xiii | Canadian imports of, 1881-87. | | |
| re ancient sea-level, | | | | 247, 252 | R C |
| Eastern Canada.... | 223 | x | Spinel. | | |
| Iroquois beach..... | 221 | x | Burgess tp..... | 210 | ix |
| | 226 | A xiii | Comparison of, with corundum | 214 | vii |
| Sperenberg, NEAR BERLIN, GER- | | | Exhibit of, at Chicago..... | 187 | ii |
| MANY. | | | Raglan tp..... | 237 | viii |
| Salt beds of..... | 178 | i | Ross tp..... | 233 | viii |
| Sperry, Francis L. | | | Russia..... | 237 | viii |
| Analysis by, of:— | | | Specific gravity of..... | 233 | viii |
| copper ore, Blake tp..... | 147 | ix | black | | |
| fire-clay, Toronto..... | 54 | R C | Crystals of, in eastern Ont..... | 187 | ii |
| matte, Sudbury dist..... | 380 | R C | <i>Spinus tristis.</i> See Goldfinch, Ameri- | | |
| Assay by, of Sudbury ores..... | 90 | i | can | | |
| Evidence by, before R. C. re:— | | | <i>Spiraea salicifolia.</i> | | |
| forest fires in mining dists.... | 311 | R C | Abitibi Lake dist..... | 241 | A xiv |
| minerals, Sudbury dist..59, 104, | | R C | Mattagami valley..... | 150 | A xv |
| tariffs..... | 232 | R C | <i>Spiranthes romanoffiana.</i> | | |
| Paper by, on nickel and nickel- | | | Abitibi Lake dist..... | 241 | A xiv |
| steel.....182-194 | | iv | Mattagami valley..... | 151 | A xv |
| Sperrylite discovered by..... | 5 | A xiv | <i>Spirifera.</i> | | |
| named after..... | 181 | R C | Port Colborne (near)..... | 35 | xi |
| | 161 | C xiv | “ <i>arenosa.</i> | | |
| Sperrylite. | | | Port Colborne (near)..... | 35 | xi |
| Copper mt., B. C..... | 162 | C xiv | Kwataboahegan river..... | 186 | A xiii |
| Description of..... | 190 | ii | “ <i>divaricatus.</i> | | |
| Hardness of..... | 202 | vi | Kwataboahegan river..... | 186 | A xiii |
| Notes on, by Goodman..... | 207 | vi | “ <i>duodenarius.</i> | | |
| Specific gravity of..... | 202 | vi | Cayuga, N. tp..... | 146 | xii |
| Sudbury dist..... | 89 | R C | Hagersville..... | 145 | xii |
| | 5 | A xiv | Kwataboahegan river..... | 186 | A xiii |
| analysis..... | 181 | R C | St. Marys..... | 148 | xii |
| | 209 | ix | “ <i>curvata.</i> | | |
| | 162 | C xiv | Kwataboahegan river..... | 186 | A xiii |
| Denison tp..... | 92 | i | “ <i>finbriata.</i> | | |
| | 178 | ii | Anderdon tp..... | 126 | xi |
| | 141 | vii | Kwataboahegan river..... | 186 | A xiii |
| | 31 | C xiv | “ <i>gregaria.</i> | | |
| notes by Coleman..... | 282, 283 | xii | St. Marys, near..... | 151, 152 | xii |
| Tin associated with..... | 211 | ix | | 96 | B xiii |
| Speziale, Andea. | 55, 57 | xi | “ <i>mutini.</i> | | |
| Spharium. | | | Hagersville..... | 145 | xii |
| Don river: Toronto..... | 230 | A xiii | St. Marys, near..... | 152 | xii |
| “ <i>sulcatum.</i> | | | “ <i>mucronata.</i> | | |
| Emerald lake..... | 87 | B xiii | Anderdon tp..... | 125 | xi |
| Sphagnum. | | | Thedford..... | 8, 75 | B xv |
| See also Moss litter. | | | “ <i>murchisoni.</i> | | |
| As a source of peat..... | 183 | i | Kwataboahegan river..... | 186 | A xiii |
| Abitibi dist..... | 190 | viii | “ <i>pennata.</i> | | |
| Suitability of, for moss-litter. | 186, 187 | vi | Thedford..... | 154 | xii |
| <i>Sphagnum fuscum.</i> | | | | 69 | B xiii |
| Shippegan, N. B..... | 144 | iii | Stony pt., L. Huron..... | 155 | xii |
| “ <i>cymbifolium.</i> | | | “ <i>varicosus.</i> | | |
| Germany, peat bogs..... | 213 | ii | Kwataboahegan river..... | 186 | A xiii |
| Sphalerite. See Zinc-blende. | | | Spittle bugs. | | |
| Sphene. See Titanite. | | | Abitibi dist..... | 129 | A xiii |

| | Page. | Vol. | | Page. | Vol. |
|---|------------|------|---|---------------|------|
| <i>Sprizella</i> . See Sparrow, house | | | Spruce. — <i>Con.</i> | | |
| <i>socialis</i> . See Sparrow, chipping | | | Michipicoten div. | 189, 190, 206 | vii |
| Split=rock portage , MISSISSAUGA RIVER, ALG. | | | 137-142 | | viii |
| Iron pyrites at. | 243, 256 | v | 200 A | | xv |
| Mispickel at. | 256 | v | 13 Bull. | | iii |
| Split=rock rapid , NIPIGON RIVER, TH. B. D. | | | Goulais river. | 197, 199 | viii |
| Character of. | 107 A | xvi | Mamainse pen. | 72 | iii |
| Photos of. | 106, 123 A | xvi | Montreal river. | 130, 200 | viii |
| Rocks on and near. | 107 A | xvi | Michipicoten island. | 61 | RC |
| Split=Rock Cable Co. | 353 | RC | Missinaibi valley. | 140 | ix |
| Spodumene . | | | Mississagi valley. | 159, 160, 172 | xii |
| Harcourt tp. | 48 | xi | Moss tp. | 79 | v |
| Perth, near. | 194 | ii | Nipigon Lake dist. | 111, 112 | iv |
| 210 | | ix | 212 | | x |
| Spotswood, Alexander | 24 | ii | 111, 138 A | | xvi |
| Spray , N. CAR. | | | Niven's base line and S. of, Alg. | | |
| Calcium carbide works at, notes. | 159 | iv | 138-141 | | ix |
| 34-36 | | v | Pishkanogama valley. | 135 | ix |
| Sprecher, George C. | 41, 69 A | xiv | Port Arthur and vicinity. | 114 | ii |
| Spree river , GERMANY. | | | Rainy river. | 65 | RC |
| Nickel on. See Schaud. | | | 117 | | iv |
| Spring (water) . | | | Savant and vicinity. | 74 | v |
| As source of supply. | 55, 56 | i | Seine river. | 149-153 | v |
| Brook , RAWDON TP., HASTINGS CO. | | | Shebandowan lake. | 117, 128 | v |
| Conglomerate near. | 201 | xi | Spanish river. | 125 | ix |
| Granite near. | 202 | xi | Timagami Lake region. | 57 | RC |
| lake , MICHIPICOTEN DIV., ALG. | | | Wabigoon lake, near. | 171 | vii |
| Minor ref to. | 291 A | xiv | black | | |
| Notes on, by J. M. Bell. | 287, 288 A | xiv | Abitibi dist. | 125 A | xiii |
| Lake Iron Co. (MICHIGAN). | | | 214, 217-235, | | xiv |
| Record of iron furnace of. | 339 | RC | 125 A | | xv |
| Springer, Dr. | | | Big river, Opasatika river. | 256 | v |
| Kaolin on land of, Hamilton tp., NIP. | 78, 86 | RC | Kenogami valley. | 112 | iv |
| Prospecting in. | 40 A | xvi | Mattagami valley. | 105 A | xiii |
| Springfield, ILL. | | | 221 A | | xiv |
| Brick pavement in. | 109, 113 | iii | 118-120, 127, 136, | | xv |
| Springvale , WALPOLE TP., HALD- MAND CO. | | | diameter. | 142, 145 A | xv |
| Fossils from. | 144 | xii | Michipicoten div. | 295 A | xiv |
| Lime-kilns at. | 56 B | xiii | Moose River basin. | 176 A | xiii |
| Limestone at, analysis. | 144, 152 | xii | Savant lake. | 88 | ii |
| Corniferous. | 118 B | xiii | gall louse See Gall louse. | | |
| quarrying. | 54 B | xiii | white | | |
| Spruce . | | | Abitibi dist. | 125 A | xiii |
| Abitibi dist. | 176-190 | viii | 214-223, 228-231, | | xiv |
| 107, 109, 124 A | | xiii | 125 A | | xv |
| 196-205, 249-251 A | | xiv | Mattagami valley. | 221 A | xiv |
| 126, 127 A | | xv | 118-121, 127, 136 A | | xv |
| Black River reg. | 184-188 | xii | diameter. | 139-145, | xv |
| Blanche river. | 215 | xi | Michipicoten div. | 295 A | xiv |
| 173-182 | | xii | Moose River basin. | 176 A | xiii |
| Distribution. | 120 | iv | harbour , L. SUPERIOR. See | | |
| Fourth meridian and base lines, | | | White Spruce harbour. | | |
| R. R. d. | 180 | vii | Spurr, J. E. | | |
| Gypsum mt. | 158 A | xiii | Ref. to report by, on Mesabi iron | | |
| Hudson Bay slope. | 176 | vi | range. | 92 | v |
| Lac Seul. | 62 | v | 195, | | x |
| Lake Huron slope. | 170 | vi | 164 A | | xv |
| Matawin river. | 132 | v | Views of, on horizon of Mesabi | | |
| Mattagami valley. | 128-130 | ix | iron range. | 153, 154 | ix |
| 105, 106, 122, 123 A | | xiii | Squash. | | |
| 188-195 A | | xiv | Mississagi river. | 161, 167 | xii |
| 119-124, 144 A | | xv | Redstone river. | 107 A | xiii |
| age. | 143 A | xv | Squasiche river , OPASATIKA RIVER, ALG. | | |
| diameter. | 142, 152 A | xv | Contact, Pre-Cambrian and Pale- | | |
| | | | ozoic, near. | 138 A | xiii |
| | | | "Squaw" (YACHT) | 253 | vi |
| | | | 42 | | vii |
| | | | 59 | | viii |

| | Page. | Vol. | | Page. | Vol. |
|---|------------|------|--|----------|------|
| Squaw chute, MISSISSAGI RIVER. | | | Standard Mica Co. | | |
| Copper mining near..... | 100 | xii | Capital and date of charter..... | 10 | ix |
| Mining and gardening near..... | 164 | xii | Work proposed by, Burgess tp., | 132 | x |
| Huronian near..... | 171 | xii | Manufacturing Co. | 119 | ii |
| Squirrel. | | | Mining and Development Co. | | |
| Abitibi dist. | 127 A | xiii | Capital and date of charter..... | 7 | vi |
| island, L. St. CLAIR, U. S. | 108 | v | Mining Company of Algoma. | | |
| lake, TIMAGAMI DIST., NIP. | | | Capital and date of charter..... | 11 | xi |
| Rocks in vicinity of..... | 172 | x | Oil and Gas Co. | | |
| Stables. | | | Amount paid by, to Treasury, | | |
| Moss litter for..... | 214 | ii | 1900..... | 18 | x |
| notes by Copenhagen Milk | | | Merged with United Gas and Oil | | |
| Supply Co. | 211, 212 | ii | Co. | 19 | x |
| <i>Stachys palustris.</i> | | | Oil Co. | | |
| Mattagami valley..... | 151 A | xv | Represented at Pan-American | | |
| Stadacona Gold Mining Co. | | | Exhibition..... | 84, 86 | xi |
| Capital and date of charter..... | 9 | x | Work by, Findlay, Ohio..... | 121, 123 | i |
| Staebler, J. M. | 85 | x | Petrolea dist..... | 107 | ix |
| Stafford tp., RENFREW CO. | | | Peat Co. | | |
| Limestone in..... | 102, 104 B | xiii | Capital and date of charter..... | 5 | xii |
| Staffordshire, ENGLAND. | | | Sewing Machine Co. | | |
| Iron industry in..... | 360 | RC | Output of, 1893..... | 119 | ii |
| Stag island (ISLE AUX CERFS), ST. | | | Silver and Cobalt Mg. Co. | | |
| CLAIR RIVER, U. S. | 108 | v | Capital and date of charter..... | 26 A | xv |
| Stahl, Christopher | | | Tool Co. | | |
| Smelting works (cobalt) built | | | Torsion tests by..... | 193 | iv |
| by, at Schneeberg..... | 75 B | xiv | Underground Cable Co. | 119 | ii |
| Stalactites. | | | White Lime Co. | | |
| Definition of..... | 542 | RC | Kilns and quarry of, Galt, photo. | 126 B | xiii |
| Stalagmites. | | | Standing-stone lake, E. of L. NI- | | |
| Definition of..... | 542 | RC | PIGON, TH. B. D. | 123 A | xvi |
| Stalker pyrites mine, NEAR PLEYNA, | | | Standish, M. | 49 A | xiii |
| FRONTENAC CO. | | | Stanger, H. | 89 A | xvi |
| Notes on, by Fraleek..... | 164 A | xvi | J. H. | 134 | x |
| Stambaugh, D.; H.; and J. | 105 | viii | Stanhope, P. W. | 33 | xi |
| Stamford tp., WELLAND CO. | | | Stanley Smelting Works. | | |
| Limestone quarry in..... | 96 | i | Capital and date of charter..... | 31 A | xvi |
| | 119 B | xiii | Hollandia mine worked by..... | 78 A | xvi |
| Stamp mills. | | | Katharine lead mine acquired by | 91 A | xv |
| Advantages of tests by..... | 212 | v | Notes on, 1905..... | 91 A | xv |
| Cost of, per stamp..... | 424 | RC | Worked by, 1906..... | 18 A | xvi |
| Kingston school of mines, results. | 214 | v | tp., YORK CO. | | |
| Paper, by Hardman, on effective | | | Gravel pits in. See Williams- | | |
| use of..... | 237-243 | vi | burg. | | |
| School of Practical Science, Tor- | | | Stanleyville. See Micaville. | | |
| onto..... | 176, 177 | v | Stannite. | | |
| Standard Asbestos Co. | | | Hardness and specific gravity of. | 202 | vi |
| Capital and date of charter..... | 12 | vii | Stanros, Kusta | 33, 35 A | xvi |
| Mining by, near Actinolite. 91, 92, | 97 | iii | Stapleton salt works, CLINTON, | | |
| Cement Co. | | | HURON CO. | 23 A | xvi |
| Capital and date of charter..... | 37 A | xiii | Star Iron Mill, PITTSBURG. | | |
| Chemical Co. | | | Labour employed at, statistics... | 370 | RC |
| Arsenic manufactured by..... | 122 | xi | of the East gold mine, MAR- | | |
| Clay Co. | | | BLE LAKE, FRONTENAC CO. | | |
| Brick-yard of, North Bay..... | 83 B | xv | Mining class at..... | 39, 41 A | xv |
| Cobalt Mines. | | | Notes on, 1904..... | 76, 77 A | xiv |
| Capital and date of charter..... | 29 A | xvi | 1905..... | 89 A | xv |
| Fertilizer and Chemical Co. | | | 1906 and photos..... | 74, 75 A | xvi |
| Notes on, by Fraleek..... | 193 A | xvi | Producing, 1905..... | 4, 88 A | xv |
| Brodie..... | 179 | RC | of the East Gold Mg. and | | |
| Merritt..... | 169 | RC | Milling Co. | | |
| Superphosphate production of, | | | Capital and date of charter..... | 37 A | xiii |
| notes..... | 33, 34 | vi | Silver Cobalt Mg. Co. | | |
| gold mine, L. OF THE WOODS. | | | Capital and date of charter..... | 29 A | xvi |
| Notes on, 1896..... | 49 | vi | Nova Scotia mine owned by..... | 81 A | xv |
| Gold Mining and Develop- | | | silver mine, N. OF WHITEFISH | | |
| ment Co. | | | LAKE, TH. B. D. | | |
| Capital and date of charter..... | 12 | viii | Rich silver in Animikie forma- | | |
| | 10 | ix | tion of..... | 225 | i |
| Work by, Emperor mine..... | 45, 84 | viii | | 238 | iv |

| | Page | Vol. | | Page | Vol. |
|--|----------|-------|---|--------------|--------|
| Stark, James. | 214 | v | Steel. — <i>Con.</i> | | |
| Starvation creek, NIGHT-HAWK | | | Manufacture of:— | | |
| LAKE, NIP..... | 130 | ix | at Sault Ste. Marie..... | 63, 64 | x |
| Starving pt., L. OF THE WOODS, R. | | | 97, 98 | | xi |
| R. D. | | | in Canada, importance of.... | 402 | R C |
| Route from, to Turtle portage... | 118 | vii | notes by Bessemer and See- | | |
| Station iron mine, WOLLASTON TP., | | | bohm | 471 | R C |
| HASTINGS CO. | | | Molybdenum for hardening.... | 232 | vii |
| Notes on, by Clute | 133 | R C | 46 | | xi |
| Statistics (MINERAL AND MINING). | | | Nickel for hardening..... | 9 | i |
| <i>See also</i> Mining lands. | | | 384 | | R C |
| Note.—The opening pages of | | | <i>See also</i> Nickel-steel. | | |
| each volume contain a | | | Pig-iron converted into, loss by. | 84 | ii |
| statistical report for | | | Quality of, improvement in.... | 185 | iv |
| the year. | | | Statistics of, 1881 | 116 | ii |
| Collection of, by Geological Sur- | | | 1882, 1891-2 | 82 | ii |
| vey | 6 | vii | 1901 | 12 | xi |
| notes on | 13, 14 | x | 1902 | 12 | xii |
| Dakota, U. S. | 424 | R C | 1903 | 2 | A xiii |
| Importance of | 5 | xi | 1904 | 1-3, 13-15 | A xiv |
| Method of computing | 4, 5 | A xvi | 1905 | 1-3, 15, 16 | A xv |
| for copper. | 4 | A xvi | 1906 | 5, 6, 17, 18 | A xvi |
| Should be compulsory for mine | | | Tungsten for hardening..... | 233 | vii |
| owners | 423 | R C | Use of, with concrete | 174, 175 | A xiv |
| Utility of | 413 | R C | and Iron Implement Co. | 119 | ii |
| to injure mining booms. | 423 | R C | Co. of Scotland. | | |
| Staurolite. | | | Experiments by, on nickel-steel. | 145 | ii |
| L. Superior, north shore, in | | | rails. | | |
| gneisses | 210 | ix | Canadian imports of, from U. S., | | |
| Sudbury dist., photo of cross- | | | 1881-87..... | 253, 468 | R C |
| section | 272, 273 | xii | For railways, size, weight and | | |
| Stavanger, STAVANGER AMT., NOR- | | | price..... | 365, 366 | R C |
| WAY. | | | river, L. SUPERIOR. | | |
| Pyrites mining near..... | 192 | A xvi | Animikie at mouth of..... | 238 | iv |
| Stead, J. E. | | | Moraine on..... | 50 | R C |
| Paper by, on Saniter process, | | | Rapids on, photo.... | 112, 113 | ix |
| ref. to..... | 93, 95 | ii | Waterpower on..... | 252 | vii |
| Speech by, re Mond nickel pro- | | | ships. | | |
| cess | 118 | viii | First construction of..... | 368 | R C |
| Steam engines. See Locomotives. | | | Steele, George W. | 42 | vi |
| Disadvantage of, as opposed to | | | Hugh | 65, 156 | v |
| electricity | 133 | v | 75 | | ix |
| Steamers. | | | J. A. | 74 | A xvi |
| Nickel in boilers of..... | 144 | ii | J. E. | | |
| Stearns, A. M. | | | Manager, Clearwater gold mine.. | 67 | vii |
| Notes by, on Black Bay quarry, | | | 91 | | viii |
| L. Superior..... | 100 | i | Jack Lake gold mine. | | |
| James W. See Barnard-Argue- | | | 81, 82 | | ix |
| Roth-Stearns Oil and Gas Co. | | | 106 | | x |
| Steatite (SOAPSTONE). | | | 242, 256 | | xi |
| <i>See also</i> Rensselaerite. | | | 82 | | xii |
| Huronian areas, notes by Bell .. | 81 | i | 70 | | A xiii |
| Occurrences of | 210 | ix | 54 | | A xiv |
| Rainy River dist. | 73 | iv | Jefferson | | |
| Pipestone lake..... | 61, 76 | iv | Gas well of, notes on..... | 128 | i |
| Rainy lake | 76, 85 | iv | gold mine, STURGEON LAKE, | | |
| Steben, GERMANY. | | | TH. B. AND R. R. DIST. | | |
| School of mines at..... | 498 | R C | Notes on, 1901..... | 148 | xi |
| Steel, B. C. | | | Steep-hill falls, MAGPIE RIVER, L. | | |
| Boring by, for oil in Portland tp. | 283 | v | SUPERIOR. | | |
| Steel. | | | Conglomerate at..... | 344 | A xiv |
| <i>See also</i> Flange steel. | | | Fall of..... | 286 | A xiv |
| Aluminium for castings of..... | 174 | i | Portage at, photo of..... | 176, 177 | xii |
| Canadian exports of..... | 246-254 | R C | River near, description..... | 201 | vii |
| production, 1886-7 | 243 | R C | Steep Rock Development Co. | | |
| Comparison of, with nickel-steel. | 191 | iv | Capital and date of charter..... | 30 | A xvi |
| | | | Steep-rock lake, SEINE RIVER, | | |
| | | | R. R. D. | | |
| | | | Character of country near..... | 133 | xi |

| | Page. | Vol. | | Page. | Vol. |
|---|-------------|------|---|----------|------|
| Steep-rock lake. — <i>Con.</i> | | | Stephen tp., HURON CO. | | |
| Description of..... | 144, 145 | v | Brick-yards in. <i>See</i> Crediton. | | |
| and geology..... | 70-72 | v | Onondaga formation in. <i>See</i> Exeter. | | |
| river from, to Shoal lake..... | 68, 71 | v | Stephenson, George | | |
| Glacial stria on..... | 89 | v | Locomotives improved by..... | 366 | RC |
| Gold on..... | 3 | v | James | | |
| mining..... | 267 | vi | <i>See</i> Tabor and Stephenson claims. | | |
| <i>See also</i> Elizabeth g. m. | 150 | xi | Sterling, Mr. | | |
| Harold Lake g. m. | | | Apatite mining by, Loughboro tp. | 251 | ii |
| Iron ore on and near..... | 44 A | xiv | Sterling Emery Wheel Mfg. Co. ... | 240 | viii |
| mining..... | 112 | x | Stettin, GERMANY. | | |
| 133, 265, 266 | | xi | Peat bog near..... | 213 | ii |
| notes by Miller..... | 306-309 | xii | <i>See also</i> Carolinenhorst. | | |
| overlying limestone.... | 76 | ii | Steubenville, Ohio. | | |
| prospecting..... | 25, 58 | xi | Brick pavement of..... | 112 | iii |
| boring..... | 20 | xii | Stevens—? | | |
| 42, 43 A | | xiii | Part owner, Raymond mica mine. | 126 | xii |
| pyrites on, notes..... | 72, 73 A | xiv | A. E. | 52 | xi |
| 173, 175 A | | xvi | W. F. | 91 | viii |
| Limestone on..... | 76 | ii | 105 | | x |
| analysis..... | 152 | vii | W. H. | | |
| 160 | | viii | Experiments by, with insecti- | | |
| 100 B | | xiii | cides..... | 29, 114 | xi |
| Muskeg near..... | 146 | xi | island, SHOAL LAKE, L. OF THE | | |
| Notes on, by Coleman..... | 78 | vi | WOODS. | | |
| Portage to, from Atikokan river, | | | Gold mining near..... | 253 | xi |
| description..... | 143 | v | pottery works, BALDWIN, GA. | | |
| Schists near, chloritic..... | 134 | xi | Analysis of clay from..... | 160 A | xiii |
| Lake series. | | | Stevenson, E. | | |
| Views <i>re.</i> of Smyth and Van Hise. | 158 | vii | Gold mining by, Eagle lake..... | 96 | x |
| Steese, R. C. | 105 | viii | L. | | |
| | 118 | ix | Gold mining by, Eagle lake..... | 96 | x |
| Steln, BAVARIA. | | | Stevensville, BERTIE TP., WELLAND | | |
| Pencil works at..... | 37 | vi | CO. | | |
| Steindler, E. J. | 83 A | xv | Natural gas supply of..... | 44 | xi |
| Steinhoff and Gordon. | | | 21, 91 A | | xiv |
| Govt. drill hired to..... | 44, 45 A | xiii | Stewart, D. E. K. | | |
| Stella gold mine, ANDREW BAY, L. | | | Evidence by, before R. C. <i>re.</i> — | | |
| OF THE WOODS. | | | gold, Hastings dist. | 110, 111 | RC |
| Accident at, 1897..... | 33 | vii | lithographic stone, Madoc tp. | 53 | RC |
| Notes on, 1897..... | 38, 39, 112 | vii | mica, Hungerford tp..... | 149 | RC |
| 1898..... | 62, 63, 277 | viii | mining statistics..... | 425 | RC |
| 1900..... | 91 | x | Interested in Sophie gold mine.. | 92 | vii |
| Photo of..... | 112, 113 | ix | 117 | | x |
| pyrites mine, St. LAWRENCE | | | Iron mining by, near Madoc.... | 97 | vii |
| CO., N. Y. | 191 A | xvi | 41 | | viii |
| Stellar Silver Cobalt Corporation. | | | Owner, Brennan iron mine..... | 262 | xi |
| Capital and date of charter..... | 29 A | xvi | Kennebec, McKellar and | | |
| Stellaria longifolia. | | | Rollins claims..... | 105 | xi |
| Abitibi Lake dist..... | 241 A | xiv | Elihu | 145 | x |
| Mattagami valley..... | 150 A | xv | G. M. | 209 | x |
| Stelzner, Prof. A. W. | | | J. | 105 | viii |
| Notes by, on gabbro, Sudbury | | | 118 | | ix |
| dist..... | 296 | xii | J. H. | 117 | vii |
| origin of Sudbury | | | 236 | | xi |
| ores..... | 278 | xii | John | | |
| 17 C | | xiv | Evidence by, before R. C. <i>re.</i> — | | |
| Stenoposa fibrosa. | | | iron, Hastings dist..... | 132 | RC |
| Gore Bay..... | 77, 78 B | xiii | mining laws..... | 314 | RC |
| Stephanite. | | | phosphate manufacture..... | 402 | RC |
| Badger mine, Port Arthur dist.. | 210 | ix | Richardson Hill location..... | 111 | RC |
| Hardness and specific gravity of. | 201 | vi | Minor ref. to..... | 61 | vi |
| Joachimsthal, Bohemia..... | 61 B | xiv | 244 | | viii |
| Stephen, Septimus Alfred | | | Louis B. | 215 | i |
| Notes by, on royalties in N. S. | | | 217 | | iv |
| Wales..... | 30, 31 | i | M. | 144 | x |
| | | | T. J. | 87, 90 | xi |

| | Page. | Vol. |
|---|--------------|-------|
| Stewart's location, PIGEON RIVER, | | |
| Th. B. D. | 189 | vi |
| Stewartsville, Ohio | 121 | i |
| Stibulite (ANTIMONY GLANCE). | | |
| Determination of..... | 204, 209 | vi |
| Hardness of..... | 201 | vi |
| Marmora and Shetfield tps..... | 190 | ii |
| Occurrences of..... | 210 | ix |
| Palmerston tp..... | 219 | v |
| Specific gravity of..... | 201 | vi |
| Stickney, J. | 110 | A xv |
| Stifel, Edward W. | 59 | viii |
| Stiff, Charles E. | | |
| Report by, on Natural gas in | | |
| Ontario..... | 42-45 | xi |
| Stiker, S. P. | 134 | i |
| Stilbite. | | |
| Composition of..... | 227 | vi |
| Reported in trappean rocks..... | 210 | ix |
| Stiles, T. W. | | |
| Manager, Ontario smelting works. | 280 | xi |
| | 121 | xii |
| Still lake, E. of L. Nipigon, Th. | | |
| B. D. | | |
| Iron range on..... | 144, 145 | A xvi |
| Stillman, C. O. | | |
| Statistics by, of oil in Kent co.... | 94 | A xvi |
| Stilpnomelane. | | |
| Madoc tp..... | 210 | ix |
| Stirling, Charles | | |
| Gold prospecting by, L. of the | | |
| Woods..... | 102 | vi |
| | 60 | viii |
| Part owner, Trojan and Sullivan | | |
| mines..... | 43, 45 | vii |
| Stirling, Rawdon tp., Hastings co. | | |
| Brick-yard in..... | 69 | B xv |
| Phosphate and Mfg. Co. | | |
| Capital and date of charter..... | 12 | vii |
| Stobie, James | | |
| See also Stobie iron mine. | | |
| Stobie nickel mine. | | |
| Evidence by, before R. C. re:— | | |
| iron, Aberdeen tp..... | 143 | R C |
| minerals, Sudbury dist. | | |
| | 58, 104, 112 | R C |
| mining laws..... | 310 | R C |
| tariffs..... | 231 | R C |
| technical education..... | 426 | R C |
| Iron mining by, Aberdeen tp.... | 143 | R C |
| | 64 | ii |
| Minor ref. to..... | | |
| Part owner, nickel mine, Levack | | |
| tp..... | 274 | v |
| Stobie iron mine.... | 249 | iv |
| Stobie copper mine, JOHNSON TP., | | |
| ALG. | 22, 86 | xi |
| falls, VERMILION RIVER. | | |
| Galena and zinc-blende at..... | 91 | i |
| Nickel mining at. See Creighton | | |
| mine. | | |
| Onwatin slate at..... | 95 | C xiv |
| iron mine, ABERDEEN TP., ALG. | | |
| Notes on, 1894..... | 249 | iv |
| Quartzite in, Huronian..... | 68 | R C |
| nickel mine, BLEZARD TP., NIP. | | |
| Accident at..... | 53, 57 | xi |
| Copper in, percentage..... | 378 | R C |
| pyrites in..... | 90 | i |

| | Page. | Vol. | |
|-------------------------------------|---------------------|--------|------|
| Stobie nickel mine.—Con. | | | |
| Discovery of..... | 58 | R C | |
| | 236 | xii | |
| | 3, 134, 169 | C xiv | |
| Inspector's report on, 1891..... | 230 | i | |
| | 1892..... | 245 | ii |
| | 1893... 183, 184 | iii | |
| | 1894... 245, 246 | iv | |
| | 1895... 272, 273 | v | |
| | 1896... 273, 274 | vi | |
| | 1897... 96, 97 | vii | |
| | 1898..... | 36 | viii |
| | 1899... 97, 98 | ix | |
| | 1900... 122, 123 | x | |
| | 1901, 268, 269, 279 | xi | |
| | 1902, idle..... | 57 | xii |
| Map of | At end of vol. | xii | |
| Matte from, analysis..... | 152 | C xiv | |
| Minor refs. to..... | 103 | R C | |
| | 285 | xii | |
| Nickel oxide from, analysis..... | 180 | ii | |
| Notes on, by Bell..... | 24 | R C | |
| | Merritt..... | 89, 90 | R C |
| Ore deposits of, character.... | 278, 279 | xii | |
| | 197 | A xiii | |
| Photos of..... | 256, 257 | xi | |
| | 256, 257 | xii | |
| Plans and geology of..... | 263-268 | xii | |
| Production from..... | 21, 138, 156 | C xiv | |
| Railway to..... | 136 | C xiv | |
| Rocks at and near..... | 434 | R C | |
| | 291 | xii | |
| | 81 | C xiv | |
| conglomerate | 9 | C xiv | |
| enstatite in..... | 295 | xii | |
| greywacké | 89 | C xiv | |
| nickel-bearing | 13 | C xiv | |
| norite..... | 19, 101, 114 | C xiv | |
| notes by Coleman | 57-60 | C xiv | |
| petrography | 207 | x | |
| | 290, 294 | xii | |
| quartz porphyry | 240 | xii | |
| syenite..... | 434 | R C | |
| Section of..... | 59 | C xiv | |
| Sulphides of..... | 277 | xii | |
| | 153 | C xiv | |
| Mining Co. | | | |
| <i>See also Stobie copper mine.</i> | | | |
| Capital and date of charter..... | 9 | x | |
| No. 3 mine. See Levack pro- | | | |
| erties. | | | |
| station, BLEZARD TP., NIP. | | | |
| Farm land near | 106 | C xiv | |
| Rocks at and near..... | 92 | C xiv | |
| Stockholm, SWEDEN. | | | |
| Mining school at, notes by Rich- | | | |
| ards..... | 512, 513 | R C | |
| Stockton, Lewis. | 51 | xii | |
| Stockwell, F. | | | |
| Lead mining by, Loughborough | | | |
| tp..... | 146 | R C | |
| Stockworks. | | | |
| Definition of..... | 52 | iv | |
| Stodart (1823). | | | |
| Experiments by, on nickel alloys. | 105 | C xiv | |
| Stoddart, Peter. | 50 | xi | |
| Stokes, A. H. | 28 | ix | |
| Stolpas, ALNOE, SWEDEN. | | | |
| Rock at, like heronite..... | 190 | ix | |

| | Page. | Vol. | | Page. | Vol. |
|---|----------|------|---|-----------------|------|
| Stone, C. W. | 98 | x | Storms, W. H. | | |
| C. J. | 19, 257 | xi | Ref. to paper by, on gold in Cali- | | |
| George C. | 73 | vii | fornia | 71 | iv |
| J. H. | 79 | viii | Stormy lake, E. OF MANTOU LAKE, | | |
| R. | 13 | i | R.R.D. | 126 | vii |
| | 105 | xi | Storrs, E. R. | 95 | viii |
| | 118 | ix | Storrington Mining Co. | | |
| | 144 | x | Capital and date of charter | 12 | vii |
| | 75 | xi | tp., FRONTENAC CO. | | |
| W. E. | | | Amber in | 245 | i |
| Notes by, on auriferous slate, | | | Apatite in | 194 | ix |
| near Bad Vermilion lake | 64 | v | mining.....170-173, 176, 441 | | R C |
| W. S. | 82 | vi | <i>See also</i> Opinicon mine. | | |
| Stoneberry. <i>See</i> Cherry, choke | | | Barytes in | 195 | ix |
| Stone portage, MISSISSAUGA RIVER, | | | Iron in, hematite | 199 | ix |
| ALG. | 194 | viii | mining. <i>See</i> Equitable | | |
| <i>quarries.</i> <i>See</i> Quarries. | | | mine. | | |
| Stonebridge, WELAND CO. | | | <i>See also</i> Dog lake. | | |
| Natural gas supply of | 44 | xi | Marl in | 121 A | xiv |
| Stonedam portage, PIPESTONE | | | Mica mining in | 133, 135 | x |
| LAKE, R. R. D. | | | <i>See also</i> Wheel Mary mine. | | |
| Pyrrhotite on | 61, 74 | iv | Nickel in | 220 | v |
| Stonehouse, William | | | Story, W. W. | 203 | v |
| Pottery works of, Carlton West. | 118 B | xv | Stoves. | | |
| Stoness, Jabez | | | For burning peat, diagram and | | |
| Manager, Bobs Lake mica mine.. | 89 A | xvi | notes | 226, 227 | xii |
| Mica prospecting by, Bobs lake.. | 103 A | xv | photo.....208, 209 | | xii |
| Part owner, Stoness mica mine.. | 133 | x | Imports of, to Canada, 1881-87.. | | |
| | 289 | xi | 248, 253 | | R C |
| Stoness mica mine, BEDFORD TP., | | | Stowell, J. M. | 200 | R C |
| FRONTENAC CO. | | | W. A. | | |
| Notes on, 1900 | 133, 134 | x | Gold mining by, near Wawa lake. | 73 | xi |
| 1901 | 289 | xi | Licence to | 144 | x |
| 1902 | 127, 128 | xii | 64 | | xii |
| 1903 | 92 A | xiii | Manager, Sunrise gold mine | 47 A | xiii |
| Production of, 1898 | 18 | viii | Straight lake, MONCRIEFF TP., ALG. | | |
| 1902, decreasing.. | 131 | xii | Copper on | 106 | R C |
| Stony lake, PETERBOROUGH CO. | | | Crystalline schists on | 80 | i |
| Corundum belt on | 205 | viii | Diabase dikes near | 76 | i |
| Escarpments near | 97 B | xiii | Galena south of | 29, 106 | R C |
| Gold on | 204 | xi | Greywacké on | 74 | i |
| Peristerite on | 206 | ix | Minor ref. to | 35 B | xv |
| Rocks on and near | 209-213 | viii | Striae on, direction | 211 | x |
| Lake bay, KOSKIBOGANOG | | | Lake Nickel Mg. Co. | | |
| LAKE, PETERBORO CO. | | | Capital and date of charter | 12 | vii |
| Potsdam formation on | 209 | viii | Stranahan, C. B. | 134 | vii |
| pt., L. HURON. | | | 107 | | x |
| Fossils from | 155 | xii | Strange quarry, ROCKWOOD, WEL- | | |
| Limestone from, analysis | 155 | xii | LINGTON CO. | | |
| 69 B | | xiii | Character of limestone from | 121 B | xiii |
| Hamilton formation. | 25 B | xiii | tp., TH. B. D. | | |
| Point road, ESSEX CO. | | | Silver mining in | 202 | R C |
| Oil on | 108 A | xv | <i>See also</i> Augusta mine. | | |
| Storsteen, NORWAY. | | | Gopher mine. | | |
| Pyrites deposits at | 192 A | xvi | Silver Bluff mine. | | |
| Stormont co. | | | Silver Glance mine. | | |
| Fossils from | 224 | x | <i>Straparollus canadensis.</i> | | |
| Limestone in, notes by Miller.. | 110 B | xiii | Anderdon tp. | 127 | xi |
| dairy farm. | 218 | x | Stratford, S. EASTHOPE TP., PERTH | | |
| Storms. | | | CO. | | |
| Abitibi dist., damaging forests .. | 199 A | xiv | Altitude of | 141 | xii |
| Hamilton, 1894 | 30 | iv | Brick making at:— | | |
| Hawk lake, S. of Shebandowan | | | clay for | 115 B | xv |
| lake | 128 | v | 150 A | | xiv |
| Lac des Mille Lacs, notes by | | | analysis | 17 B | xv |
| Hind and Falliser | 119 | v | notes and photos | 42, 58, 91-94 B | xv |
| Lake of the Woods | 185 | v | Limestone at, thickness | 123 B | xiii |
| Mattagami valley | 119 A | xv | Trenton | 113 A | xv |
| Shebandowan Lake dist. | 119, 120 | v | | | |

| | Page. | Vol. | | Page. | Vol. |
|---|------------|------|---|--------|------|
| Stratford, — Can. | | | <i>Streptelasma prolificum</i> . | | |
| Natural gas at, boring for..... | 150 | xii | Kwataboahagan river..... | 18 A | xiii |
| | 96 B | xiii | Port Colborne, near..... | 35 | xi |
| Oil well at, log..... | 110, 114 A | xv | <i>Streptopus roarus</i> . | | |
| Peat bogs near..... | 191 | i | Abitibi Lake dist..... | 241 A | xiv |
| Brick, Tile and Lumber Co. | | | Mattagami valley..... | 150 A | xv |
| Capital and date of charter..... | 26 A | xv | Stretch, R. H. | | |
| Clay used by, analysis..... | 12, 14 B | xv | Section by, of Gatling gold mine. | 107 | R C |
| Photo of cut-off machine of..... | 45 B | xv | Striae. See Glacial striae. | | |
| Works of, notes..... | 91, 92 B | xv | Striberg, F. G. | 341 | xii |
| Peat Co. | | | iron mine, SWEDEN..... | 338 | xii |
| Peat bog of, Brunner tp., notes.. | 205 | xii | Stribling, F. W. | 144 | x |
| Strathcona, Lord | | | | 75 | xi |
| High Commissioner for Canada.. | 4 | vii | | 67 | xii |
| Wire from, to Roberts-Austen... 116 | viii | | Strickland, H. T. | | |
| Strathcona, CAMDEN E. TP., AD- | | | Belmont gold mine discovered | | |
| DINGTON CO. | | | by..... | 47, 48 | iii |
| Cement works at..... | 18, 26 B | xiii | <i>Stricklandinia canadensis</i> . | | |
| | 116 B | xv | Thorold..... | 117 B | xiii |
| notes and photo..... | 136-138 A | xiv | “ <i>elongata</i> . | | |
| nickel mine, LEVACK TP. | | | Hagersville, near..... | 145 | xii |
| Analysis of ore from..... | 67 C | xiv | Walpole tp..... | 143 | xii |
| Boring in..... | 197 A | xiii | Stringer silver mine, COLEMAN TP., | | |
| | 65 C | xiv | Nip. | | |
| Notes on, by Sjostedt..... | 198 A | xiii | Diabase in..... | 50 B | xiv |
| | 67 C | xiv | Stroganoff, Count | 487 | R C |
| Photo of..... | 208, 209 A | xiii | Strom, Alexander | 232 | i |
| Strathroy, ADELAIDE TP., MIDDLE- | | | <i>Stromatopora concentrica</i> . | | |
| SEX CO. | | | Gore Bay..... | 77 B | xiii |
| Brick-yard of, notes..... | 79 B | xv | “ <i>granulata</i> . | | |
| Straubel, Gustavus | 89 A | xiv | North Cayuga tp..... | 146 | xii |
| Straw, Peter | 236 | v | “ <i>mammillata</i> . | | |
| Straw. | | | North Cayuga tp..... | 146 | xii |
| Value of, as fertilizer, compared | | | Rockford..... | 143 | xii |
| with moss-litter..... | 142 | iii | “ <i>perforata</i> . | | |
| Strawberries. | | | Rockford..... | 143 | xii |
| Abitibi dist..... | 253 A | xiv | “ <i>tuberculata</i> . | | |
| Black and Blanche rivers..... | 188 | xii | Rockford..... | 143 | xii |
| L. Superior, north shore..... | 147 | viii | Woodstock..... | 148 | xii |
| Mamainse harbour..... | 129 | viii | “ <i>tubulifera</i> . | | |
| Tomstown..... | 54 A | xvi | Kwataboahagan river, notes.... | 184 A | xiii |
| Strawberry blight. | | | photo.... | 192 A | xiii |
| Night-hawk lake..... | 123 A | xiii | Stromatoporoids. | | |
| island, L. HURON. | | | Kwataboahagan river..... | 182 A | xiii |
| Granite on, for building..... | 93 | i | L. Superior, N. shore..... | 156 | viii |
| Ordovician rocks on..... | 86 | i | Rockford..... | 88 B | xiii |
| lake, E. OF PIPESTONE LAKE, | | | <i>Strombodes pentagonus</i> . | | |
| R. R. D. | | | Anderdon tp..... | 125 | xi |
| Minor ref. to..... | 88 | vi | Strong, B. E. | 156 | vi |
| Rocks on, chlorite schists..... | 85 | iv | William M. | | |
| Keewatin..... | 50, 63 | iv | Manager, Foley gold mine..... | 68 | vii |
| Strawhat lake, NEAR STEEP-ROCK | | | | 84 | viii |
| LAKE, R. R. D. | | | | 82 | x |
| Iron ore on..... | 309 | xii | Scramble gold mine.... | 37 | ix |
| pyrites on..... | 182 A | xvi | Sultana gold mine.... | 39 | ix |
| notes by Fraleck... 184 A | xvi | | | 251 | xi |
| Street, William P. R. | | | Notes by, on Sultana gold mine.. | 80 | xi |
| Decision by, re natural gas in | | | tp., P.S.O. | | |
| Kingsville..... | 118 | i | Artesian wells in..... | 54 | i |
| pavements. See Brick, vit- | | | Boring in, for iron..... | 51 | xii |
| rified | | | Strontianite. | | |
| tp., Nip. | | | Anderdon tp., in dolomite..... | 127 | xi |
| Arsenolite in..... | 195 | ix | L. Erie, Put-in-Bay island..... | 127 | xi |
| Stelow, Albert | 58 A | xv | Nepean tp., analysis..... | 210 | ix |
| <i>Streptelasma corniculatum</i> . | | | Strontium. | | |
| Cayuga N. tp..... | 146 | xii | Kingston and near Sydenham... 60 B | xiii | |
| Hagersville..... | 145 | xii | Mineral pt., L. Superior..... | 75 | iii |
| Villanova..... | 143 | xii | <i>Strophodontia</i> or <i>Strophodonta</i> . | | |
| | | | Anderdon tp..... | 126 | xi |

| | Page. | Vol. |
|---------------------------------------|----------|------|
| <i>Stropheodonta ampla</i> . | | |
| Cayuga N. tp..... | 146 | xii |
| Port Colborne (near)..... | 35 | xi |
| St. Marys..... | 152 | xii |
| Walpole and Townsend tps. . | 143-145 | xii |
| " <i>atrypa</i> . | | |
| Anderdon tp..... | 125 | xi |
| " <i>concura</i> . | | |
| Kwataboahagan river | 186 A | xiii |
| Stony pt., L. Huron..... | | |
| " <i>demissa</i> . | | |
| Anderdon tp..... | 125 | xi |
| Port Colborne (near)..... | 35 | xi |
| St. Marys..... | 152 | xii |
| Cayuga N. tp..... | 146 | xii |
| Hagersville..... | 144 | xii |
| Kwataboahagan river | 186 A | xiii |
| Stony pt., L. Huron..... | 155 | xii |
| Villanova..... | 143 | xii |
| Walpole tp..... | 144 | xii |
| " <i>inacquistriata</i> . | | |
| Anderdon tp..... | 125 | xi |
| Cayuga N. tp..... | 146 | xii |
| Hagersville..... | 145 | xii |
| Kwataboahagan river | 186 A | xiii |
| St. Marys..... | 152 | xii |
| Walpole tp. and Woodstock. | 144, 148 | xii |
| " <i>patersoni</i> . | | |
| Cayuga N. tp..... | 146 | xii |
| Hagersville..... | 145 | xii |
| Kwataboahagan river | 186 A | xiii |
| " <i>perplana</i> . | | |
| Anderdon tp..... | 125 | xi |
| Kwataboahagan river..... | 186 A | xiii |
| <i>Strophomena</i> . | | |
| Gore Bay..... | 77 B | xiii |
| <i>Strophonella ampla</i> . | | |
| Kwataboahagan river..... | 186 A | xiii |
| <i>Strophostylus unicus</i> . | | |
| Kwataboahagan river..... | 187 A | xiii |
| Structural materials. | | |
| See also Building stone, etc. | | |
| Paper on industry of, by Director, | | |
| 1890..... | 95-114 | i |
| Distribution of, notes by Blue... | 177 | i |
| Struthers, Joseph | | |
| Description by, of Hoepfner re- | | |
| fining process..... | 222 | ix |
| Dr. R. B. | | |
| Inquests by, Sudbury dist..... | 173 | iii |
| | 68 | vi |
| | 36 | viii |
| | 51, 52 | xi |
| | 44-46 | xii |
| | 38 A | xiii |
| W. | | |
| | 144 | x |
| | 75 | xi |
| | 67 | xii |
| Stucco lake, HASTINGS CO. | | |
| Marl at..... | 59 B | xiii |
| Stull, W. W. | | |
| Analysis by, of feldspar, Port | | |
| Coldwell..... | 147 | vii |
| Jasper conglomerate found by, | | |
| N. of Hutton tp..... | 186 | x |
| Stuntz iron mine, TOWER, MINN. | 124 | R C |

Sturgeon.

| | Page. | Vol. |
|---------------------------------------|-----------------|------------------|
| L. of the Woods..... | 169 | v |
| Mattagami river..... | 120, 131 | A XV |
| Rainy river..... | 208 | v |
| Roe of, for caviar..... | 167 | v |
| Falls, SPRINGER TP., NIP. | | |
| Agricultural land near..... | 103 | iv |
| Brick-yard at..... | 84 | B XV |
| clay for, analysis..... | 15, 27 | B XV |
| Saugeen..... | 20 | B XV |
| Pulp mill at..... | 13 | A XV |
| | 199 A | XVI |
| Reduction works at, for Cobalt | | |
| ores..... | 12 | A XVI |
| Waterpower at | 13 | A XV |
| falls, MATTAGAMI RIVER, ALG. | | |
| Description of, by Kerr..... | 120 | A XV |
| Rocks at | 133 | A XV |
| Sturgeon below..... | 131 | A XV |
| Waterpower of..... | 133 | A XV |
| falls, SEINE RIVER. | | |
| Clay near..... | 146 | xi |
| Description of river near..... | 68, 69, 153 | v |
| Gold mining near..... | 58 | iv |
| | 75 | vii |
| | 81 | viii |
| | 41 | x |
| See also Independence mine. | | |
| Iron at..... | 135 | xi |
| Minor ref. to..... | 79 | vi |
| Sericite schist near..... | 134 | xi |
| Falls Power Co. See Imperial | | |
| Pulp and Paper Co. | | |
| lake, EAST OF L. OF THE WOODS. | | |
| Gold mining in, 1896..... | 6 Bull. i | |
| | 267 | vi |
| | 1899..... | 46-49 ix |
| | 1900..... | 74, 75 x |
| | 1903..... | 64 A xiii |
| Minor ref. to..... | 185 | v |
| Notes on, by Coleman..... | 89, 90 | vi |
| lake, R. R. AND TH. B. DIST. | | |
| Altitude of | 110 | iv |
| Fish in..... | 40 | x |
| Garnets in sand on..... | 173 | vii |
| Geology of, and vicinity..... | 165 | vii |
| Gold on and near..... | 147-149 | xi |
| See also St. Anthony Reef mine. | | |
| mining, 1900..... | 38-40, 102, 103 | x |
| | 1901..... | 16, 256 xi |
| | 1902..... | 16, 82-86 xii |
| | 1906..... | 55, 60 A xvi |
| Huronian on and near..... | 18 | R C |
| | 210 | x |
| Map of | 39 | x |
| Nepheline-syenite on..... | 87, 104 | xii |
| Photo of portion of | 55 | A xiv |
| Route from, to Savant lake..... | 87, 88 | xii |
| to, from Ignace, descrip- | | |
| tion..... | 147, 148 | xi |
| lake, VICTORIA CO. | | |
| Trenton fossils near..... | 113 | B xiii |
| Lake Mining Co. | | |
| Work by, 1900..... | 103 | x |
| | 1901..... | 149, 150, 256 xi |
| For further refs. See English | | |
| River Gold Mg. Co. | | |
| pt., L. SUPERIOR. | | |
| Diabase at, sketch of..... | 145 | ix |

| | Page. | Vol. |
|---|----------|-------|
| Sturgeon river, GROUND-HOG RIVER, ALG. | 133 | ix |
| river, NIPISSING LAKE, NIP. | | |
| Character of..... | 110 | A xvi |
| H. B. C. post on, abandoned..... | 107, 110 | A xvi |
| Lumbering on..... | 119 | iv |
| Pulp-mill on. <i>See</i> Sturgeon Falls, Webbwood. | | |
| Rocks on and near..... | 112 | A xvi |
| Roses on..... | 139 | A xvi |
| Sturgeon in..... | 111 | A xvi |
| Waterpower on. <i>See</i> Sturgeon Falls, Webbwood. | | |
| river, STURGEON LAKE, R. R. AND TH. B. DIST. | | |
| Huronian in valley of..... | 171 | vii |
| Sturtevant. | | |
| Experiments by, on iron ore..... | 357 | R C |
| Styria, AUSTRIA-HUNGARY. | | |
| Iron smelting in, with charcoal..... | 483 | R C |
| Succinite. <i>See</i> Amber. | | |
| Suckers. | | |
| Lake of the Woods..... | 97 | vi |
| Michipicoten div..... | 297 | A xiv |
| Nipigon Lake dist..... | 139 | A xvi |
| Sucker Creek Gas and Oil Co. | | |
| Capital and date of charter..... | 26 | A xv |
| lake, BLANCHER RIVER, NIP. | | |
| Notes on, by Bolton..... | 181 | xii |
| lake, FLYING-POST BROOK, MISSAUBI RIVER, ALG. | 139 | ix |
| lake, MANITOW LAKE DIST., R. R. D. | 62 | iv |
| river, CHIN RIVER, ABITIBI DIST. | 251, 252 | A xiv |
| Suckert, J. | | |
| Paper by (and Willson) on the Carbides and Acetylene commercially considered..... | 152-166 | iv |
| Sudbury, McKIM TP., NIP. | | |
| Agricultural land near..... | 103 | iv |
| ..... | 161 | x |
| ..... | 106 | C xiv |
| Beach near, altitude..... | 211 | x |
| ..... | 103 | C xiv |
| Brick-yard near..... | 55, 56 | B xv |
| clay for, analysis..... | 26, 27 | B xv |
| Saugeen..... | 20 | B xv |
| Cyanite near..... | 237 | vii |
| Graphite near..... | 168 | x |
| Huronite near..... | 194 | ii |
| Iron ores near, notes by Coleman..... | 187, 201 | x |
| Kame near..... | 102 | C xiv |
| Millerite at..... | 213 | vi |
| Mining class at..... | 217 | iv |
| ..... | 6, 217 | v |
| ..... | 260 | vii |
| Mining Land Agency at:— | | |
| report for 1900..... | 147, 148 | x |
| 1901..... | 82 | xi |
| 1902..... | 49 | xii |
| 1904..... | 34 | A xiv |
| Mining Recorder's office at..... | 36 | A xvi |
| Nickel ores near, mining. <i>See</i> Sudbury dist. | | |
| niccolite..... | 194 | ii |
| Polydymite in..... | 194 | ii |

Sudbury.—Con.

| | Page. | Vol. |
|--|----------|--------|
| Rocks at and near..... | 85 | i |
| breccia..... | 12 | C xiv |
| diabase dikes..... | 434 | R C |
| ..... | 76 | i |
| ..... | 52 | C xiv |
| photo..... | 84 | C xiv |
| gabbro, notes..... | 75-78 | C xiv |
| photo..... | 77, 122 | C xiv |
| granite, photo..... | 125 | C xiv |
| greywacké..... | 88, 89 | C xiv |
| Huronian..... | 128 | C xiv |
| norite..... | 121 | C xiv |
| petrographical notes..... | 205-208 | x |
| quartz-porphry..... | 9 | C xiv |
| quartzite..... | 92 | C xiv |
| Smelting at, description..... | 378, 379 | R C |
| limestone for..... | 2, 13 | B xiii |
| quartz for. <i>See</i> Quartz. | | |
| Sulphur in, roast beds at..... | 61 | x |
| Brick Co. | | |
| Capital and date of charter..... | 24 | A xiii |
| Cobalt Mfg. Co. | | |
| Capital and date of charter..... | 30 | A xvi |
| Copper and Nickel Co. | | |
| Capital and date of charter..... | 10 | ix |
| Customs Smelting Co. | | |
| Capital and date of charter..... | 12 | vii |
| creek, NEAR SUDBURY, NIP. | | |
| Greywacké on..... | 89 | C xiv |
| dist., ALG. AND NIP. | | |
| Augite in..... | 195 | ix |
| Building stone in..... | 93 | i |
| Cobalt in, production..... | 18, 19 | v |
| 25-27, 141, 142 | | vii |
| 19 | | viii |
| 8 | | A xiv |
| Copper in, compared with copper deposits of Rio Tinto..... | 372 | R C |
| discovery..... | 24 | R C |
| evidence before R. C. | | |
| 103-106 | | R C |
| notes by Bell..... | 23 | R C |
| Merritt..... | 88-90 | R C |
| production..... | 18, 19 | v |
| 25-27, 141, 142 | | vii |
| 19 | | viii |
| Galena in..... | 203 | R C |
| ..... | 91 | i |
| auriferous..... | 29 | R C |
| Gold in, evidence before R. C.... | 66 | R C |
| Iron pyrites in..... | 181 | A xvi |
| Minerals in, distribution..... | 151 | C xiv |
| evidence before R. C. | | |
| 58, 59 | | R C |
| new, paper by Emmons..... | 168-170 | ii |
| paper by Blue..... | 433-436 | R C |
| Mining in, report for:— | | |
| 1891..... | 230-233 | i |
| 1892..... | 241-242 | ii |
| 1893..... | 182-191 | iii |
| 1894..... | 240-249 | iv |
| 1895..... | 267-274 | v |
| 1896..... | 270-277 | vi |
| 1897..... | 93-97 | vii |
| 1898..... | 33-37 | viii |
| 1899..... | 96-99 | ix |
| 1900..... | 121-125 | x |

| | Page. | Vol. |
|-------------------------------------|-------------------------|--------|
| Sudbury dist.—<i>Con.</i> | | |
| Mining in, report for.— <i>Con.</i> | | |
| 1901..... | 276-284 | xi |
| 1902..... | 117-125 | xii |
| 1903..... | 82-87 | A xiii |
| 1904..... | 68-72 | A xiv |
| 1905..... | 61-66 | A xv |
| 1906..... | 62-67 | A xvi |
| Nickel and nickel ores of:— | | |
| contrasted with Cobalt ores... | 101 | A xiii |
| discovery..... | 88, 89 | i |
| | 214 | ix |
| | 235, 284, 286 | xii |
| | 3, 134 | C xiv |
| matte of, analysis..... | 380 | R C |
| | 154 | ii |
| | 152 | C xiv |
| method of treatment..... | 401, 405 | R C |
| notes by Levat..... | 153-155 | ii |
| notes on..... | 23, 24 | R C |
| | 88, 89, 176 | i |
| | 129-132 | ii |
| by Roberts-Austen..... | 106, 107 | viii |
| proportion of claims held by | | |
| International Nickel Co. | 22 | xi |
| report by Coleman..... | 235-303 | xii |
| | Pt. C | xiv |
| roasting..... | 379 | R C |
| | 168, 169 | iii |
| smelting..... | 370, 378, 391, 404, 405 | R C |
| notes by R. C..... | xxii | R C |
| paper by Bain..... | 216, 217 | ix |
| See also Canadian Copper Co. | | |
| Orford Copper Co. | | |
| Copper Cliff. | | |
| statistics..... | 72 | R C |
| 1892-1894..... | 20, 21 | iv |
| 1895..... | 18, 19 | v |
| 1897..... | 25-27, 141, 142 | vii |
| 1898..... | 19 | viii |
| 1899..... | 17, 18 | ix |
| 1900..... | 35, 36 | x |
| 1901..... | 19, 20 | xi |
| 1902..... | 17 | xii |
| from 1890..... | 288 | xii |
| 1903..... | 6 | A xiii |
| 1904..... | 9-11 | A xiv |
| 1904 from commencement .. | 118 | C xiv |
| 1905..... | 47 | A xv |
| 1906..... | 15, 56 | A xvi |
| unlimited..... | 148 | ii |
| Palladium from..... | 6 | A xiv |
| Platinum in, notes by Emmens . | 5 | A xiv |
| sperrylite..... | 89 | R C |
| | 5 | A xiv |
| analysis..... | 181 | R C |
| | 209 | ix |
| | 162 | C xiv |
| notes by Coleman..... | 282, 283 | xii |
| See also Denison | | |
| tp. | | |
| Pyrrhotite in..... | 88, 89 | i |
| | 207 | ix |
| | 14, 15, 75, 116 | C xiv |
| analysis..... | 163, 165 | ii |
| | 208 | ix |
| description..... | 158 | C xiv |

| | Page. | Vol. |
|--|---------------|--------|
| Sudbury dist.—<i>Con.</i> | | |
| Pyrrhotite in.— <i>Con.</i> | | |
| evidence before R. C..... | 103-104 | R C |
| notes by Bell..... | 23 | R C |
| Rocks of, notes by Bell..... | 72-86 | i |
| Silver in, evidence before R. C. | 203 | R C |
| percentage..... | 151, 153 | C xiv |
| Sulphur fumes in..... | 286 | xii |
| | 22 | A xvi |
| Surveying in, difficulties of..... | 171 | i |
| Waterpower in..... | 10, 68 | A xiv |
| | 62, 63 | A xv |
| Zinc-blende in..... | 91 | i |
| Mining Co. | | |
| Capital and date of charter..... | 12 | vii |
| Mining div. | | |
| Creation of, and description..... | 36, 38 | A xvi |
| Power Co. | | |
| Plant of, completed..... | 13 | A xv |
| Work by, Vermilion river..... | 68, 69 | A xiv |
| | 62 | A xv |
| Suett, W. | 106 | vii |
| Sugar. | | |
| Hardwood bush for making, | | |
| Agawa river. | | |
| "Sugar Apatite."..... | 131 | viii |
| Description of..... | 442 | R C |
| Sugar island, L. HURON. | 109 | v |
| | 152, 155 | viii |
| island, STUCCO LAKE, HASTINGS | | |
| co. | | |
| Trenton formation on..... | 59 | B xiii |
| maple bush. | | |
| Blanche river..... | 215 | xi |
| Sugarloaf rapid, MISSISSAUGA RIVER, | | |
| ALG. | 195 | viii |
| Sullivan, Alan | | |
| Manager for Anglo-Canadian | | |
| Gold Estates..... | 48, 49 | ix |
| | 40, 73, 74 | x |
| | 15, 149, 256 | xi |
| | 15, 16 | xii |
| Manager, Elizabeth gold mine. | | |
| | 133, 150, 240 | xi |
| Ontario Gold Conces- | | |
| sions..... | 48, 49 | ix |
| Notes by, on Elizabeth mine . | 16, 17 | xi |
| Savant Lake allu- | | |
| vial..... | 18 | xi |
| D. | | |
| Brick-yard of, Picton..... | 95 | B xv |
| clay for, analysis..... | 15 | B xv |
| J. | | |
| Beryl found by, Lyndoch tp. 234, 235 | | vii |
| Manager, Olden zinc mine. | 93 | A xvi |
| | 79 | A xvi |
| J. | | |
| Mining by, Michipicoten div. .. | 105 | viii |
| gold mine, CAMP BAY, L. OF | | |
| THE WOODS. | | |
| Notes on, 1898..... | 45 | vii |
| quarry, PICTON, PRINCE ED- | | |
| WARD CO. | | |
| Lime-stone from, analysis..... | 99, 100 | B xiii |
| Sulman-Teed cyanide process. | | |
| Description of..... | 59 | vi |

| | Page. | Vol. | | Page. | Vol. |
|---|---------------|-------|--------------------------------------|----------------|---------|
| Sulphide, HUNGERFORD TP., HASTINGS CO. | | | Sulphuretted hydrogen. | | |
| Pyrites mining at..... | 79 | A xvi | Findlay, Ohio..... | 120 | i |
| Sulphuric acid plant, photo..... | 158, 197, 198 | A xvi | Heating power of..... | 480 | R C |
| | | | Tilbury tp., in gas..... | 99 | A xvi |
| ores. | | | "Sultana" s.s. | 48 | vii |
| Treatment of..... | 375 | R C | Sultana bay, L. OF THE WOODS, | | |
| Sulphur (BRIMSTONE). | | | R.R.D. | | |
| Earth's crust, proportion in.... | 147 | R C | Photo..... | 128, 129 | v |
| For pulp industry, notes..... | 199 | A xvi | gold mine, SULTANA ISLAND, | | |
| sulphuric acid..... | 179 | R C | L. OF THE WOODS. | | |
| Hardness of..... | 20 | A xv | Accidents at..... | 235-238 | v |
| In iron ores, evil effects of..... | 201 | vi | | 42, 43 | x |
| 88 | | ii | Chlorination works at..... | 277 | viii |
| 24 | | xi | Closed down, 1906..... | 60 | A xvi |
| marl, evil effects of..... | 121 | A xiv | Depth of, 1895..... | 4 | v |
| oil, process for extracting..... | 27 | iv | 1899..... | 35 | ix |
| peat bogs..... | 206 | ii | Evidence <i>re</i> before R.C.. | 64, 118, 446 | R C |
| Japan..... | 179 | R C | Exhibit of, at Buffalo..... | 85 | xi |
| New Caledonia, percentage in | | | Fire at..... | 5 | v |
| nickel ores..... | 151 | ii | Gneiss in, porphyritic..... | 116 | vi |
| Notes on, by Copp..... | 448 | R C | Map showing position of..... | 15 | iii |
| Goodwin..... | 220 | vi | Mill erected at, 1892..... | 235 | ii |
| Ontario, Burgess N. tp..... | 210 | ix | Minor refs. to..... | 14 | xii |
| Clinton..... | 194 | ii | | 34 | A xiv |
| Denbigh tp..... | 210 | ix | Notes on, by Blue..... | 16-19 | iii |
| Hastings co., iron ores..... | 173 | C xiv | Merritt..... | 109 | R C |
| Marmora tp., plant for | | | 1891..... | 223 | i |
| treating..... | 56-61 | iii | 1892..... | 231 | ii |
| mineral-bearing rocks..... | 22 | A xvi | 1893..... | 225-227 | iii |
| Niagara Falls..... | 210 | ix | 1894..... | 68, 225 | iv |
| peat bogs, proportion of..... | 233 | xii | 1895..... | 177-180 | v |
| Shiltou mine..... | 61 | A xvi | 1896..... | 7 | Bull. i |
| Sudbury dist., elimina- | | | 93-96, 117, 248-251 | | vi |
| tion of..... | 404 | R C | 1897. 28, 29, 45-48, 114, 115 | | vii |
| 168, 169 | | iii | 1898..... | 43, 50-52 | viii |
| 61 | | x | 1899..... | 38-42 | ix |
| 300, 301 | | xii | 1900..... | 69-71, 90, 91 | x |
| fumes, effect of..... | 286 | xii | 1901..... | 80, 251, 252 | xi |
| Pennsylvania, proportion in an- | | | 1902 (idle)..... | 96 | xii |
| thracite..... | 233 | xii | 1903..... | 59, 60 | A xiii |
| Price of crude..... | 220 | vi | 1904..... | 47 | A xiv |
| Relation of, to nickel in pyrrho- | | | 1905..... | 57, 58 | A xv |
| tite..... | 164 | ii | Operating, 1895..... | 4 | v |
| Sicily..... | 179 | R C | 1905..... | 4, 47 | A xv |
| laws <i>re</i> mining..... | 298 | R C | 1906..... | 6 | A xvi |
| Specific gravity of..... | 201 | vi | Photos of..... | 18 | iii |
| springs. | | | | 160, 161 | v |
| Charlotteville tp..... | 210 | ix | | 112, 113 | vi |
| Knox tp., east of..... | 235 | A xiv | | 16, 96 | vii |
| Sulphuric acid. | | | | 32, 33, 80, 81 | ix |
| Brimstone for making..... | 179 | R C | | 56 | A xv |
| replaced by pyrites.... | 20 | A xv | Prospects of, 1892..... | 192 | ii |
| Canadian production, 1886-87.... | 243 | R C | Quartz of, character.... | 3, 36, 37, 68 | iv |
| For chemical industry..... | 22 | A xvi | | 50 | v |
| oil refining..... | 161, 162 | R C | Re-opening of, expected..... | 43 | A xvi |
| Iron pyrites for. <i>See</i> Iron pyrites. | | | Road to, built by Govt..... | 9 | vi |
| Manufacture of, notes on..... | 375 | R C | Section of..... | 39 | ix |
| | 193-196 | A xvi | Veins of, character..... | 109 | R C |
| Uses of, notes by Fraleck.... | 196-200 | A xvi | Gold Mine, Ltd. | | |
| Works for, Brockville tp..... | 152 | A xvi | Capital and date of charter..... | 37 | A xiii |
| Capelton, Que..... | 177 | R C | Purchase by, of Sultana mine.... | 59 | A xiii |
| | 153 | A xvi | island, L. OF THE WOODS. | | |
| Hungerford tp.... | 79, 80 | A xvi | Gold on..... | xvi | R C |
| Sault Ste. Marie.... | 62, 63 | x | mining..... | 26 | R C |
| Sudbury, suggested.... | 180 | R C | evidence before R.C. | | |
| United States, list of..... | 184 | A xvi | | 64, 118, 446 | R C |
| | | | notes by Blue..... | 13-19 | iii |
| | | | Merritt..... | 109 | R C |
| | | | <i>See also</i> Sultana g.m. | | |

| | Page | Vol | | Page | Vol |
|--------------------------------------|------------|--------|--|---------------|--------|
| Sultana island. — <i>Con.</i> | | | Sun Portland Cement Co. — <i>Con.</i> | | |
| Ore bodies of..... | 123, 124 | vi | Operating, <i>Con.</i> | | |
| Rocks on, petrography..... | 155 | vii | 1905..... | 17 | A xv |
| porphyritic granite .. | 116 | vi | 1906..... | 20 | A xvi |
| 54..... | viii | | Plant of..... | 33 | xi |
| petrography..... | 121 | vi | photo of laboratory..... | 160 | A xiv |
| (JUNIOR) gold mine, OPPOSITE | | | Sunbeam (AL 282) gold mine, IS- | | |
| SULTANA ISLAND, L. OF THE | | | LAND FALLS, SELKIE RIVER. | | |
| WOODS. | | | Depth of, 1899..... | 35 | ix |
| Acquired by Dominion Gold Mg. | | | Notes on, 1898..... | 92 | viii |
| and Red. Co..... | 174 | v | 1899..... | 80 | ix |
| Prospecting on, 1898..... | 37 | vii | 1900..... | 103 | x |
| Working, 1892..... | 231 | ii | 1901..... | 239, 240 | xi |
| nickel mine, DRURY AND | | | 1902..... | 81, 82 | xii |
| TRILLIPS, ALG. | | | 1903..... | 71 | A xiii |
| Deposits of, contrasted with those | | | 1904..... | 3, 41, 42, 56 | A xiv |
| of Victoria mine..... | 27 | C xiv | Photo of..... | 272, 273 | xi |
| Minor ref to..... | 36 | x | Prospects of, 1903..... | 5 | A xiii |
| Notes on, by Coleman..... | 195, 196 | A xiii | Shut down, 1900..... | 103 | x |
| 22, 23 | C xiv | | 1905..... | 50 | A xv |
| Rocks in and near : | | | Sunderland, DEIRHAM CO., ENG. | | |
| conglomerate..... | 80 | C xiv | Apatite deposits to, 1884-5..... | 413 | R C |
| gossan..... | 23 | C xiv | Sundridge, STRONG TR., P.S.D. | | |
| nickel-eruptive..... | 23, 63 | C xiv | Artesian wells in..... | 54 | i |
| petrography..... | 209 | A xii | Sunnel, Victor. | 35 | A xvi |
| norite..... | 214 | A xiii | Sunrise Mining Co. | | |
| 112 | C xiv | | Capital and date of charter..... | 9 | xii |
| Ophir Mining Co. | | | Work by, 1902..... | 65 | xii |
| Capital and date of charter..... | 9 | x | 1903..... | 47 | A xiii |
| Summer Mining classes. | | | Sunshine lake, NEAR MANITOUL LAKE, | | |
| Organised..... | 6 | v | R.R. D..... | 123 | vii |
| Report on, for 1894..... | 216-221 | iv | siding, CONMER TR., TH. B. D..... | 130 | xi |
| 1895..... | 215-220 | v | Supe, O. | 106 | vii |
| 1895..... | 197, 198 | vi | 105 | viii | |
| 1897..... | 260, 261 | vii | Superior copper mine, GAUDETE | | |
| 1901..... | 61-69 | xi | TR., ALG. | | |
| 1902..... | 54-61 | xii | Accident at..... | 57 | A xiii |
| 1903..... | 52-57 | A xiii | Character of deposits..... | 11 | A xiv |
| 1904..... | 37-42 | A xiv | 12 | A xv | |
| 1905..... | 39-46 | A xv | Concentrating plant at, proposed..... | 16 | A xvi |
| 1906..... | 49-54 | A xvi | Minor ref. to..... | 58 | A xiii |
| Summers, J. O. | 268 | xi | Notes on, 1901..... | 274, 275 | xi |
| 55 | A xiii | | 1902..... | 100 | xii |
| 32, 67 | A xv | | 1903..... | 82 | A xiii |
| Summit creek, KOOTENAY LAKE, | | | 1904..... | 41, 62 | A xiv |
| B.C. | | | 1905..... | 68, 69 | A xv |
| Cyanite on..... | 237 | vii | 1906..... | 15, 72 | A xvi |
| lake, ANZHEKUMING LAKE, | | | Photo of..... | 80, 81 | A xiii |
| R.R.D. | | | Prospecting in, with Govt. drill..... | 43, 45 | A xiii |
| Gold prospecting and mining on..... | 85 | vi | Copper Co. | | |
| 68 | A xiii | | Capital and date of charter..... | 11 | xi |
| lake, MICHIPICOTEN DIV., ALG. | | | Prospecting by, with Govt. drill..... | 43, 45 | A xiii |
| Esker on..... | 206 | A xv | Work by, 1901..... | 274, 275 | xi |
| Minor ref. to..... | 179 | A xv | 1906..... | 16, 72 | A xvi |
| Morainic deposits near..... | 192 | A xv | <i>See also</i> Superior cop- | | |
| lake, OMBABIKA RIVER. | 14 | R C | per mine. | | |
| Lake Gold Mining Co. | | | Gold and Copper Co. | 105 | xiii |
| Capital and date of charter..... | 9 | xii | 118 | ix | |
| Work by, 1902..... | 91, 92 | xii | Portland Cement Co. | | |
| 1903..... | 68, 69 | A xiii | Capital and date of charter..... | 9 | xii |
| 1906..... | 43, 58 | A xvi | Clay and marl used by, analysis..... | 183 | A xiv |
| Sun Portland Cement Co. | | | Notes on, and photo of plant..... | 160-62 | A xiv |
| Analysis of clay and marl used | | | Plant of, building..... | 17 | A xv |
| by..... | 183 | A xiv | 20 | A xvi | |
| Capital and date of charter..... | 9 | x | Silver Mg. and Land Co. | | |
| Operating, 1902 (notes)..... | 31, 32, 35 | xii | Capital and date of charter..... | 12 | vii |
| 17 | B xiii | | Superphosphate. — <i>See</i> Apatite. | | |
| 1903..... | 17 | A xiii | | | |
| 1904 (notes)..... | 159, 160 | A xiv | | | |

| | Page | Vol. | | Page | Vol. |
|---|----------|----------|--|-------------------------|---------|
| Superstition. See Indian legends. | | | Swansea, WALES.—<i>Con.</i> | | |
| Suplee, Henry Harrison | | | Smelting works at — <i>Con.</i> | | |
| Notes by, on acetylene gas.... | 28, 29 | vi | copper, methods..... | 403 | R C |
| Surface geology. | | | Wellington mines. 101, 404 | | R C |
| In connexion with artesian | | | galena, Echo lake..... | 147 | R C |
| wells..... | 52-54 | i | notes on..... | 177, 178 | c xiv |
| See also Glaciation. | | | Sudbury ores..... | 189 | iii |
| Surgical instruments. | | | | 72 | A xiv |
| Canadian imports of, 1881-87.... | 253 | R C | Swansea, YORK TP., YORK CO. | | |
| Surprise lake, SIBLEY TP., TH. B. D. | | | Sewer pipe works at..... | 19 | A xvi |
| Photos of..... | 128, 129 | vi | notes and photo..... | 117, 118 | B xv |
| Sussex co., N. Y. | | | Swanson, George | | |
| Corundum in..... | 241 | viii | Gold mine of, Aubrey tp..... | 95 | x |
| street, OTTAWA. | | | R..... | 75 | vi |
| Mica trimming works in..... | 91 | A xvi | Swart, W. G. | | |
| Sutherland, Allen | | | Swede Boys gold mine, MANITOU | | |
| Gas on farm of, Harwich tp..... | 125 | i | LAKE, R. R. D. | | |
| H..... | 13 | A xiv | See also Original Swede Boys | | |
| Hugh..... | 118 | R C | Prosp'g Co. | | |
| Hon. James..... | 22 | x | Depth of, 1899..... | 34 | ix |
| J. G..... | 118 | ix | Notes on, 1895..... | 163 | v |
| | 144 | x | 1897..... | 82, 83, 119, 123 | vii |
| | 75 | xi | 1898..... | 273 | viii |
| | | | 1899..... | 74, 75 | ix |
| Wallace | | | Rocks in..... | 263 | viii |
| Iron smelting by, Lyndhurst, | | | Sweden. | | |
| 1813..... | 319 | R C | "Balance of trade" against, | | |
| Sutton, E. S. B. | | | 1868-86..... | 397 | R C |
| | 105 | viii | Charcoal making in, method of. | 26 | ii |
| | 49 | A xiii | Divining rod from, for gold..... | 7 | Bull. i |
| bay, L. TIMISKAMING. | | | | 108 | vi |
| Limestone near..... | 87 | B xiii | Iron and iron making in..... | 328 | xii |
| SV 103-110 gold locs. See John | | | export to Gt. Britain..... | xx | R C |
| Sykes Syn. | | | notes by Bawden..... | 470, 471 | R C |
| 128, 129, 131, 166 gold locs. | | | quality..... | 33 | ii |
| See Oxford mine. | | | smelting..... | 325, 339, 390, 393, 396 | R C |
| 258 gold loc. See Tabor gold | | | statistics, 1886-90..... | 85 | ii |
| mine. | | | 1887..... | 224 | R C |
| Svarto island, SWEDEN. | | | notes..... | 342 | R C |
| Iron mines of, Ball-Norton sep- | | | Mining laws of..... | 299 | R C |
| arator used at..... | 327, 328 | xii | school in. See Stockholm. | | |
| Swallow. | | | Nickel in, discovery..... | 163 | c xiv |
| Abitibi dist., Nip..... | 189 | xii | Peat in, cost of production.... | 195 | ii |
| Cliff..... | | | industry, notes..... | 218, 219 | ii |
| Abitibi dist., Nip..... | 126 | A xiii | moss-litter..... | 216 | ii |
| river, L. SUPERIOR. | | | | 139, 140 | iii |
| Beaches on, level of..... | 154, 155 | viii | tests on plant for..... | 34 | A xiii |
| Conglomerate on: falls on..... | 142 | viii | Gold Mining Co. | | |
| Keweenaw series on..... | 168 | viii | Capital and date of charter..... | 12 | vii |
| Swallowtail, yellow | | | Work by, 1896..... | 48 | vi |
| Abitibi dist..... | 129 | A xiv | Swedish Export Association. | | |
| Swamps. See Muskeg. | | | Sweeney, J. M..... | 66 | A xiii |
| Swampy Cree Indians. | | | Sweeny, Mrs. G. A. | | |
| James bay..... | 134 | iv | Roy..... | 42, 94, | viii |
| =ground portage, MISSISSAUGI | | | | 79 | ix |
| RIVER, ALG..... | 195 | viii | Sweet briar. | | |
| river, PISHKANOGAMA LAKE. | | | Abitibi dist..... | 253 | A xiv |
| See Muskego river. | | | gale. | | |
| Swan lake, WHITE-CLAY RIVER. | | | Abitibi dist..... | 218 | A xiv |
| ABITIBI RIVER. | | | Grass hills, MONTANA, U. S. | | |
| Notes on, by Bolton..... | 183, 184 | xii | Eruptive masses of..... | 157 | vii |
| Swank, James W. | | | Sweetzer. | | |
| Notes by, on Bessemer process.. | 365 | R C | Swego river, OTTAWA RIVER. | | |
| steel industry of | | | Limestone near mouth of..... | 104 | B xiii |
| Gt. Britain..... | 366 | R C | Swell bay, RAINY LAKE, R. R. D. | | |
| Swansea, WALES. | | | Rocks on..... | 78 | iv |
| Anthracite of, analysis..... | 5 | Bull. ii | petrography..... | 93 | iv |
| Smelting works at..... | 67 | R C | Swenson —? | | |
| advantageous conditions..... | 376 | R C | Swick, J. | | |
| Cobalt ores..... | 11 | A xvi | | 144 | x |

| | Page. | Vol. | | Page. | Vol. |
|---|------------|------|--|-------------|------|
| Swift, H. S. | 118 | ix | Syenite. — <i>Cont.</i> | | |
| Swift, James P. H. | 178 | iii | Kingston..... | 71 | R C |
| Swinney, Alfred J. G. | 144 | x | Lake Superior, N. shore..... | 129 | vi |
| | 261 | v | Jackfish bay, petrography..... | 103, 104 | v |
| | 60 | vi | Thunder bay..... | 28 | R C |
| | 90 | vii | Michipicoten div..... | 7 Bull. iii | |
| Switzerland. | | | Mississagi river..... | 163 | xii |
| Nickel coinage in..... | 161 | ii | Montreal river, W. branch..... | 81 | i |
| plating in, process of..... | 161 c | xiv | Moss tp..... | 25 | R C |
| | 158 | ii | Nomenclature..... | 543 | R C |
| Sydenham, LOUGHBOROUGH TWP., PROX- TENAC CO. | | | Notes on, by Miller..... | 234 | vi |
| Apatite at. <i>See</i> Coe apatite mine. | | | Ottawa river, above Ottawa..... | 104 B | xiii |
| Mica at..... | 203 | ix | Port Coldwell, paper by Cole- man..... | 208-213 | xi |
| amber..... | 150 | R C | petrography..... | 148 | vii |
| mining, 1891..... | 244, 245 | i | Sudbury dist..... | 276 | xii |
| 1892..... | 249 | ii | Timiskaming lake..... | 41 B | xiv |
| 1893..... | 192, 193 | iii | gneiss. | | |
| 1895..... | 276-278 | v | Manitou lake..... | 64 | iv |
| 1906..... | 23 A | xvi | nepheline | | |
| works at..... | 125 | x | <i>See also</i> Syenite. | | |
| | 28, 291 | xi | Hastings corundum dist. | | |
| | 106 A | xv | 210, 211, 222, 223..... | vii | |
| Strontium at..... | 60 B | xiii | 214-218..... | viii | |
| Waterpower at..... | 244 | i | analysis..... | 207 | viii |
| Mica and Mg. Co. | | | Bancroft (near)..... | 106, 107 A | xv |
| Capital and date of charter..... | 12 | vii | boulders..... | 224 | vii |
| Mining by, near Sydenham..... | 244 | i | discovery..... | 228 | vii |
| | 249 | ii | Dungannon tp..... | 198 | vi |
| river, GREY CO. | | | notes by Adams..... | 245 | viii |
| Clinton formation on..... | 48 B | xiii | photo..... | Facing 222 | vii |
| Niagara formation on, quarried..... | 49 B | xiii | microphoto..... | 216, 217 | viii |
| Oil on, boring for..... | 5 | v | Koshkabogamog lake..... | 193 | xi |
| tp., GREY CO. | | | Lake Superior..... | 208-210 | xi |
| Apatite in, evidence before Roy. Com..... | 176, 177 | R C | Mistaken for feldspar..... | 211 | vi |
| Brick-clay and cement in. <i>See</i> Owen Sound. | | | lime..... | 210 | vii |
| Clinton formation in..... | 48 B | xiii | Paper, by Coleman, on corundi- ferous..... | 250-253 | viii |
| <i>Pentamerus oblongus</i> in..... | 49 B | xiii | Sturgeon lake, Th. B. d..... | 87, 104 | xii |
| Sydere tp., ALG. | | | notes by Miller..... | 105 | xii |
| Timber and soil in..... | 142, 143 A | xv | Tral mts..... | 232 | viii |
| Sydney, CAPE BRETON CO., N.S. | | | pegmatite. | | |
| Cost of iron making at..... | 34 | x | Methuen tp..... | 207 | viii |
| Sulphuric acid made at..... | 196, 200 A | xvi | Syenite lake, NEAR KABENUNG LAKE, MICHIPICOTEN DIV., ALG. | | |
| tp., HASTINGS CO. | | | Rocks near..... | 306 A | xiv |
| Iroquois beach in. <i>See</i> Frank- ford. | | | Sykes, John <i>See</i> John Sykes gold mine. | | |
| Sydvaranger, FINAENACKEN, NOR- WAY. | | | Sylvan Oil Co. | | |
| Schists of..... | 306 A | xvi | Capital and date of charter..... | 13 | vii |
| Syene, EGYPT. | | | Sylvania, Lucas co., Ohio. | | |
| Syenite called after..... | 543 | R C | Cincinnati arch near..... | 116 | i |
| Syenite. | | | Sylvanite (GRAPHIC TELLURIDE). | | |
| Abitibi dist., petrography..... | 117, 118 A | xiii | Determination of..... | 204 | vi |
| Astron bay, L. of the Woods, petrography..... | 146 | vii | Huronian mine, Moss tp..... | 25 | R C |
| Blanche river..... | 174 | xii | 38, 40..... | iv | |
| Burns, corundum-bearing..... | 231 | viii | 77..... | v | |
| Caribon lake, R. R. d..... | 52 | v | 210..... | ix | |
| Description of..... | 543 | R C | exhibited at Chicago..... | 191 | ii |
| Exhibited at Pan-American Exhibit..... | 87 | xi | Lake Superior..... | 194 | ii |
| World's Fair..... | 186 | ii | Symes, Capt. James Bowie | 138 | viii |
| Hastings corundum dist..... | 210-212 | vii | Symmes, H. C. | 58 | ix |
| 206, 209-224..... | viii | | H. D..... | 38, 40, 103 | x |
| notes by Miller..... | 226-230 | vii | 86..... | xii | |
| photos..... | 216-217 | viii | Synclines. | | |
| with magnetite..... | Facing 222 | vii | French river..... | 67 | i |
| | | | L. Superior, Keweenaw form- ation..... | 76 | iii |

| | Page. | Vol. | | Page. | Vol. |
|--|---------------|------|---|----------------|------|
| Synclines. — <i>Con.</i> | | | Taconyte. | | |
| Panache lake..... | 73 | i | Animikie iron range..... | 310 | xii |
| St. Clair river, east of..... | 54 | i | 164, 166, 167 A | xv | |
| Syndicate Mining Co. | | | Mesabi iron range..... | 258 A | xiv |
| Capital and date of charter..... | 24 A | xiii | Talbot, H. E. | 118 | ix |
| No. 1, Ltd. | | | 114 | x | |
| Capital and date of charter..... | 9 | xii | 75 | xi | |
| Syracuse, ONONDAGA CO., N. Y. | | | Joseph | 25, 26 | ix |
| Bricks from, tests on..... | 129, 130 | iii | K. H. | 118 | ix |
| Salt at..... | 14 | j | 144 | x | |
| Sulphuric acid works at..... | 184, 191 A | xvi | (OR MOON) lake, MICHIGAN | | |
| <i>Syringopora husingeri.</i> | | | COTEN DIV. | | |
| Anderdon tp..... | 125 | xi | Iron ore in, no chance of..... | 173 | xi |
| Cayuga N. tp..... | 146 | xii | mining near. <i>See</i> Helen mine. | | |
| Hagersville..... | 145 | xii | Josephine | | |
| Kwataboahagan river..... | 181 A | xiii | mine. | | |
| Villanova and Rockford..... | 143 | xii | Rise from, to Sayer lake..... | 153 | xi |
| Woodstock..... | 148 | xii | Rocks on and near..... | 159, 167, 172 | xi |
| " <i>machurei.</i> | | | Oil and Gas Co. | | |
| Port Colborne (near)..... | 35 | xi | Capital and date of charter..... | 9 | xii |
| " <i>nobilis.</i> | | | Work by, in Elgin co..... | 108 A | xiv |
| Kwataboahagan river..... | 181 A | xiii | river, LAKE SIMCOE. | | |
| Villanova..... | 143 | xii | Trenton limestone on..... | 89 B | xiii |
| " <i>perelegans.</i> | | | road, ESSEX CO. | | |
| Anderdon tp..... | 125 | xi | Oil on..... | 90, 116, 117 A | xiv |
| Cayuga N. tp..... | 146 | xii | boring for..... | 112 A | xv |
| Hagersville..... | 145 | xii | Talc. | | |
| Kwataboahagan river..... | 181 A | xiii | <i>See also</i> Steatite. | | |
| Port Colborne (near)..... | 35 | xi | Analysis, average..... | 90 | iii |
| Villanova..... | 143 | xii | 210 | ix | |
| Walpole tp..... | 143 | xii | Associated with apatite..... | 440, 442 | R C |
| <i>Syringostroma.</i> | | | Blythfield tp..... | 210 | ix |
| L. Superior, north shore..... | 156 | viii | Canada, production, 1886-87..... | 243 | R C |
| " <i>aurora.</i> | | | Clarendon tp..... | 210 | ix |
| Kwataboahagan river..... | 182 A | xiii | Determination of..... | 205, 226 | vi |
| photos..... | 192 A | xiii | Exhibit of, at World's Fair..... | 189 | ii |
| " <i>densum.</i> | | | Gouverneur, N. Y..... | 100-102 | iii |
| Kwataboahagan river..... | 183 A | xiii | Hardness of..... | 448, 535 | R C |
| " <i>restigonchense.</i> | | | 200 | vi | |
| Kwataboahagan river..... | 182 A | xiii | 214 | vii | |
| Systems, geological | | | Hastings co., Elzevir tp..... | 9, 99, 100 | iii |
| Definition of term..... | 3 | R C | Grimsthorpe tp..... | 210 | ix |
| Order of..... | 543 | R C | 205 | xi | |
| 706 silver loc. <i>See</i> Porcupine | | | Madoc (near)..... | 210 | ix |
| mine. | | | 205 | xi | |
| 243 and 244 copper claims, | | | mining..... | 24 | x |
| NIPISGON LAKE, TH. B. D. | | | 92 A | xiii | |
| Notes on, by Coleman..... | 117 A | xvi | 26 A | xvi | |
| <i>Tabanus affinis.</i> <i>See</i> Bull dog tabanus. | | | <i>See also</i> Hen- | | |
| Tabor, James <i>See</i> Tabor and | | | derson m. | | |
| Stevenson claim. | | | production, 1904..... | 23 A | xiv |
| and Stevenson claim, THE | | | Kaladar tp..... | 99, 100 | iii |
| NEW KLONDIKE, R. R. D. | | | 210 | ix | |
| Not's on, 1898..... | 42, 75, 276 | viii | Nipissing dist., mining..... | 278 | v |
| Tabular spar. <i>See</i> Wollastonite. | | | Pipestone lake, for pipes..... | 46, 85 | iv |
| Tache, Rev. Archbishop. | 162 | v | Rock Islet bay, Watten tp..... | 85 | iv |
| Tache, R. R. D. | | | Statistics of, 1899..... | 13 | ix |
| Gold near..... | 26 | R C | 1900..... | 11, 12 | x |
| mining..... | 179 | vii | 1901..... | 13, 28 | xi |
| <i>See also</i> New Klondike. | | | 1902..... | 12, 13, 27 | xii |
| Rocks at and near..... | 123, 124, 169 | vii | 1903..... | 3, 13 A | xiii |
| Gold Mg. Co. | | | 1904..... | 1, 3, 87 A | xiv |
| Capital and date of charter..... | 13 | vii | 1905..... | 1, 4 A | xv |
| Taconian series. | | | Talcose. | | |
| Hastings co..... | 169 | i | Definition of..... | 543 | R C |
| | | | Talcose granite. <i>See</i> Protogene. | | |
| | | | slates. | | |
| | | | Huronian, gold in..... | 451 | R C |

| | Page. | Vol. | | Page. | Vol. |
|--|---------------|-----------|--|----------|--------|
| Tallman, William & Son. | | | Tam O'Shanter nickel mine, Sslder | | |
| Brick works of, near Beamsville. | 102 | i | tp. | | |
| Tallow. | | | Nickel-bearing eruptive in... | 37, 40 | iv |
| Heating power of | 481 | rc | Notes on, 1893..... | 190 | iii |
| Talon chute, MATTAWA RIVER, NIP. | | | <i>Tamias striatus.</i> | | |
| Rocks near | 81 | B xiii | Ottawa..... | 224 | x |
| lake, MATTAWA RIVER, NIP. | | | Tamworth, SHEFFIELD TP., ADDING- | | |
| Crystalline limestone on..... | 68 | i | TON CO. | | |
| | 81 | B xiii | Brick-yard at, notes..... | 56 | B xv |
| Talon lake, NEAR L. NIPIGON, TH. | | | Contact, Laurentian-Silurian .. | 27 | B xiii |
| B. D. | | | Iron ore in, at World's Fair.... | 82 | ii |
| Cedar near..... | 138 | A xvi | hematite | 133 | rc |
| Rocks near | 141 | A xvi | mining..... | 130 | rc |
| Tamar river, CORNWALL, ENG. | | | Tanks. | | |
| Arsenic mining on | 60, 61 | iii | For oil preserving, notes by | | |
| | | | Noble | 165 | rc |
| Tamarac copper mine, L. SUPERIOR. | | | Tanning. | | |
| Native copper in | 36 | rc | Line used in..... | 3, 13 | B xiii |
| Tamarack (LARCH OR HACHATAK). | | | Tantalic acid. | | |
| Abitibi dist. | 109, 126 | A xiii | Lyndoch tp., in a columbite min- | | |
| 196-205, 214, 217, 221, 223, 227, | | | eral | 236 | vii |
| 232-236, 242, 250, 251 | A xiv | | Tar. | | |
| Abitibi river and tribs. 178, 186, | 189 | viii | As a by-product of charcoal | | |
| Black river..... | 186 | xii | burning | 481 | rc |
| dead | 125 | A xv | As residue of petroleum | 155-158 | rc |
| Night-hawk lake..... | 176 | viii | Occurrences of, in Canada..... | 543 | rc |
| Porcupine Lake reg | 176 | viii | Price of, 1890..... | 164 | rc |
| | 122, 123 | A xiii | pt., GASPÉ CO., QUE. | | |
| swamps..... | 246 | A xiv | Oil at | 93 | A xiv |
| Big river, Opasatika river..... | 256 | v | <i>Taraxacum officinale.</i> | | |
| Delbert lake..... | 105, 106 | A xiii | Abitibi lake dist..... | 212 | A xiv |
| Hinterland, The..... | 121 | iv | Mattagami valley..... | 150 | A xv |
| Kenogami lake (near), Blanche | | | Tarentorus Mining Co. | | |
| river | 177 | xii | Capital and date of charter..... | 30 | A xvi |
| Kenogami valley, Th. B. d..... | 112 | iv | tp., ALG. | | |
| L. Huron slope | 170 | vi | Terraces in | 153 | viii |
| Mattagami valley..... | 123 | A xv | Wash-out south of..... | 126 | viii |
| dead.....119, 120, 127, 136, 139, | | | Tariffs. | | |
| 140, 143 | A xv | | Iron, Connec's views | 113 | ii |
| through saw-dly..... | 189-193 | A xiv | evidence before R. C..... | 390-400 | rc |
| Michipicoten div..... | 13 | Bull. iii | from U. S..... | 18 | A xvi |
| | 189, 190, 206 | vii | Mining affected by..... | 217 | rc |
| | 137, 140, 202 | viii | machinery, evil effects..... | 196 | rc |
| | 295 | A xiv | Moose Factory, amounts collected. | 135 | iv |
| Maggie river..... | 200 | vii | Nickel, into U. S., notes..... | 42-46 | vi |
| Mamainse pen..... | 72 | iii | | 28 | vii |
| Montreal river..... | 200 | viii | Oil, removal of..... | 24 | A xvi |
| Missinaibi river..... | 139 | ix | Quarrying and salt industry | | |
| Mississagi River dist..... | 172 | xii | affected by..... | 217 | rc |
| Moose River basin | 176 | A xiii | Uncertainty of prohibitive..... | 105 | ii |
| Moss tp..... | 79 | v | Tarr, E. J. | 90 | xi |
| Nipigon Lake dist..... | 111, 112 | iv | Prof. Ralph S. | | |
| | 212 | x | Notes by, on anthracite of Rhode | | |
| | 138 | A xvi | island..... | 165 | vi |
| Niven's base line, Alg., south of. | 137-141 | ix | Tarshish (BIBLICAL). | | |
| Oba lake, Alg..... | 198 | vii | Probably Tharsis copper mine, | | |
| Port Arthur dist..... | 114 | ii | Spain..... | 372 | rc |
| Rainy River dist..... | 65 | rc | Tarsus Copper and Sulphur Co. | | |
| | 180-181 | vii | Work by, in May tp..... | 68 | A xv |
| Rainy Lake reg | 95 | iv | Tasko, Matti. | 50, 57 | xi |
| Rainy river..... | 117 | iv | Tasmania. | | |
| Seine River region..... | 150 | v | Mineral lands in, ownership of.. | 44 | i |
| Sabawee lake..... | 142 | v | Mining laws of..... | 295 | rc |
| Wabigoon lake (near)..... | 171 | vii | Royalties in | 45 | i |
| Spanish river..... | 125, 126 | ix | Gold Mining Co. | 45 | i |
| Timagami Lake region | 58 | rc | Tatatichapika lake, TATATICHAPIKA | | |
| Tamboff prov., RUSSIA. | | | RIVER, ALG..... | 128 | ix |
| Peat in | 217 | ii | river, MATTAGAMI RIVER, ALG. | | |
| | | | | 127, 128 | ix |

| | Page. | Vol. | | Page. | Vol. |
|--|----------|--------|---|----------------|--------|
| Tate, James. | 56, 57 | xi | Taylor Bros. | | |
| Taulibi. | | | Brick of, Don valley..... | 105 | i |
| Abitibi dist. | 253 | A xiv | tests on | 126, 127 | iii |
| Tawney, James A. | 42 | vi | ..... | 130 | iii |
| Taws and Hartman. | | | copper mine, ANDERDON TP., | | |
| Data by, <i>re</i> cost of iron smelting. | 388 | R C | ALG. | | |
| in Snowdon tp. | 335 | R C | Notes on, 1901..... | 272, 273 | xi |
| Taxidermy. | | | 1902..... | 100 | xii |
| Arsenic used in..... | 114, 118 | xi | 1903..... | 82 | A xiii |
| <i>Tatus canadensis.</i> | | | Copper Mines Co. | | |
| Abitibi Lake dist. | 242 | A xiv | <i>See also</i> last ref. | | |
| Tay river, LANARK CO. | | | Capital and date of charter..... | 11 | xi |
| Limestone belt crossing | 46 | | Directors of..... | 272 | xi |
| tp., SIMCOE CO. | | | Road making by..... | 81 | A xiii |
| Brick-yard in. <i>See</i> Penetanguishene. | | | kiln. | | |
| Limestone in, analysis..... | 110 | B xiii | Notes on, by J. Bawden..... | 478 | R C |
| Taylor, Charles | | | tp., Nip. | | |
| Evidence by, before R. C. <i>re</i> — | | | Explored by Kay..... | 109 | A xiii |
| actinolite, Hastings co. | 52, 86 | R C | Tchiatang (INDIAN). | 35 | R C |
| Consolidated gold mine..... | 111 | R C | Teare, Ambrose. | 63 | xii |
| pyrites, Hungerford tp. | 133 | R C | J. H. | 118 | ix |
| D. |  |  | ..... | 114 | x |
| Ref. to journey by, Timiskaming |  |  | ..... | 75 | xi |
| dist. | 41 | B xiv | Teasdale, Thomas | | |
| E. D. | 33 | xii | Gypsum mine of, Grand river .. | 110 | i |
| ..... | 19 | B xiii | ..... | 242 | |
| E. J. | 106 | vii | ..... | 198 | iii |
| F. B. | | | flooded..... | 251 | iv |
| Notes by, on Nipissing beach... .. | 193 | vii | idle | 283 | v |
| Ref. to map by, of Brockville... .. | 221 | x | Technical instruction. | | |
| surveys by, Pigeon River | | | Need of, in mining industry..... | 415, 416 | R C |
| dist. 151, 152, | 157 | viii | Paper on, 1890..... | 212-217 | i |
| ..... | 175 | ix | Report on, by Royal Com. | 491-521 | R C |
| Francis D. | 232, 233 | iv | United States | 502-509 | R C |
| C. H., and R. | 75 | xi | <i>See also</i> Mining schools. | | |
| ..... | 67 | xii | Tecumseh Copper Co. | | |
| 48, 49 | 48, 49 | A xiii | Work by, Goulais bay..... | 101 | xii |
| H. J. | 103 | x | salt well, GODERICH. | | |
| ..... | 149 | vi | Notes on, by McEwan..... | 54 | R C |
| ..... | 84 | xii | tp., SIMCOE CO. | | |
| H. P. | 272 | xi | Iroquois beach in. <i>See</i> Cooks- | | |
| ..... | 49 | A xiii | town. | | |
| H. Prentiss. | 23 | xii | Teddy (INDIAN). <i>See</i> Thaddy. | | |
| J. | | | Tedford, William | 89 | viii |
| Manager, Taylor Mines Co. | 272 | xi | ..... | 78 | ix |
| Pottery maker..... | 29 | xii | ..... | 103 | x |
| ..... | 118 | B xv | Teefy tp., Nip. | | |
| J. D. | | | Minor ref. | 228 | A xiv |
| Gold prospecting by, Meteor lake. | 158 | x | Rock..... | 206 | A xiv |
| John | | | Sand in, for building material .. | 207 | A xiv |
| Treasurer, Dunnville Natural Gas | | | Soil and timber in. 204, 230, 231, | | |
| Co. | 137 | i | ..... | 244, 246 | A xiv |
| John | | | glacial drift | 187, 201 | A xiv |
| Extract from report by, on Bruce | | | Waterpower in | 208 | A xiv |
| Mines | 97 | R C | Teeswater river, BRUCE CO. | | |
| <i>See also</i> Taylor & Sons, John | | | Limestone on..... | 35 | B xiii |
| R. H. | | | Teggau (OR CLEARWATER) lake, | | |
| President, Taylor Copper mines | | | R. R. D. | | |
| Co. | 272 | xi | Rocks on and near:— | | |
| ..... | 100 | xii | Couchiching..... | 82 | iv |
| ..... | 82 | A xiii | Keewatin | 60, 61 | iv |
| resigned | 69 | A xiv | microphoto | 88 | iv |
| and Sons, John | | | serpentine..... | 50, 70, 76, 93 | iv |
| Managers of Bruce and Wellington |  |  | ..... | 209 | ix |
| mines | 96, 101 | R C | Trout in. | 44 | iv |
| and Terry. | | | Teil, FRANCE. <i>See</i> Thiel. | | |
| Iron prospecting by, Hutton tp. | 298 | xii | Teitz quarry, WALPOLE TP. | | |
| | | | Fossiliferous limestone in..... | 143 | xii |
|  |  |  | ..... | 54 | B xiii |

| | Page. | Vol. | | Page. | Vol. |
|--|-------|------|---|-------|------|
| <i>Tela polyphemus</i> . See Polyphemus moth. | | | Tennantite. | | |
| "Telegram" ss. 66-69 | iii | | Barrie tp. 210 | ix | |
| 241 | v | | Tennessee, U. S. | | |
| 101 | vii | | Appalachian system from, to | 95 | xiv |
| 120, 148, 203 | viii | | Gaspé pt., Que. 236 | RC | |
| | | | Marble of 64 | B | ii |
| | | | character | | |
| | | | Natural gas in 115, 145 | i | |
| Telgmann, Otto E. | | | Tenney farm, NEAR MADOC, HASTINGS CO. | | |
| Iron prospecting by, Ground-hog | | | Franklinite on 198 | ix | |
| River dist. 315, 316 | xii | | Tennycap, HANTS CO., N. S. | | |
| <i>Tellina grandindica</i> . | | | Pyrolusite at | | |
| Abitibi river. 189 | viii | | Tennyson lake, W. OF PORTURNE LAKE, ALG. | | |
| James bay 143 | A | xiii | Beaver dams near. 127 | A | xiii |
| Telluride of gold. See Sylvanite. | | | Trees on 124 | A | xiii |
| Tellurium. | | | tp., ALG. 63 | A | xiv |
| Huronian mine, Moss tp. 38 | iv | | Tenorite. See Melanconite. | | |
| In hessite and sylvanite 210 | ix | | Tent lake, NIP. 112, 115 | A | xiii |
| graphic. See Sylvanite. | | | Teppet, James 26 | viii | |
| Temagami Iron Mg. Co. | | | Teresa lake, S. OF MINNITAKI LAKE. | | |
| Capital and date of charter 30 | A | xvi | Gold prospecting on 64 | ix | |
| lake. See Timagami lake. | | | Terra Cotta, CHINGUACOUSY TPL., PERL CO. | | |
| Milling and Mining Co. | | | Melina clay at, for bricks, etc. 128 | iii | |
| Exhibits of, at Buffalo 25 | A | xv | Terra-cotta. | | |
| Work by, 1906 74 | A | xvi | Definition of 543 | RC | |
| Silver Mg. Co. | | | Industry of, 1890, paper on 101-105 | i | |
| Capital and date of charter 30 | A | xvi | 1906, notes on 120 | B | xv |
| Temiskaming. See Timiskaming. | | | Milton, works 66 | B | xv |
| and Hudson Bay Mg. Co. | | | Napanee, works, notes by Rath- | | |
| Capital and date of charter 37 | A | xiii | bun. 84, 85 | RC | |
| Dividends paid by 12, 13 | A | xvi | Statistics of, 1891 6 | i | |
| Prospecting by, Cobalt dist. 79 | A | xv | 1892 11 | ii | |
| Shipping, 1905 15 | B | xiv | 1893 7, 10 | iii | |
| 1906 8 | A | xvi | 1894 11, 18 | iv | |
| Temiscamingue Lithographic | | | 1895 11, 12 | v | |
| Stone and Mg. Co. 7 | vi | | 1896 12, 13 | vi | |
| 13 | vii | | 1897 15, 17 | vii | |
| Reduction Works, Ltd. | | | 1898 11, 12 | viii | |
| Exhibits of, at Buffalo. 25 | A | xv | 1899 13 | ix | |
| Temiskaming and Northern Ont. | | | 1900 11, 12, 14 | x | |
| Ry. See Timiskaming, etc. | | | 1901 12, 30 | xi | |
| Hematite Iron Co. | | | 1902 12, 13, 27 | xii | |
| Capital and date of charter. 30 | A | xvi | 1903 2, 13 | A | xiii |
| lake. See Timiskaming lake. | | | Terra Cotta Pressed Brick Co. | | |
| Mg. Co. | | | Capital and date of charter. 30 | A | xvi |
| Capital and date of charter 30 | A | xvi | Sienna. See Ochre. | | |
| 26 | A | xv | Terrace cove, L. SUPERIOR. | | |
| Work by, 1905 86 | A | xv | Molybdenite on 205 | ix | |
| Sterling Mg. Co. | | | Terraces or Beaches. | | |
| Capital and date of charter 30 | A | xvi | See also Iroquois beach. | | |
| Tempering. | | | Definition of 543 | RC | |
| Clay 43 | B | xv | Eastern Ontario, report by Cole- | | |
| Templeton tp., OTTAWA CO., QUE. | | | man, on marine 215-227 | x | |
| Apatite m. 436, 442 | RC | | Ganonoque 221 | x | |
| mode of occurrence. 178, 440 | RC | | Garden River 122, 123 | viii | |
| Asbestos from, analysis 97 | iii | | photo 136, 137 | viii | |
| Iron ore in 51 | ii | | Grey co., notes by Coleman. 176, 177 | ix | |
| Quarrying in, marble 102 | B | xiii | Hamilton 29 | B | xv |
| serpentine. 74, 84 | RC | | brick-clay from 106 | B | xv |
| <i>Tenebrio calculeusis.</i> | | | Lake Huron, notes by Coleman. 151, 152 | viii | |
| Greens creek, Ottawa 224 | x | | St. Joseph island. 199 | A | xv |
| Tenedos island, NEAR THE DARDANELLES, ASIA MINOR. | | | Sault Ste. Marie. 126 | viii | |
| 167 | i | | | | |
| Tenmile lake, UPPER WANAPITEI RIVER. See Long lake. | | | | | |
| Tennant, Sir Charles 176 | C | xiv | | | |
| George 38 | ix | | | | |
| Leslie | | | | | |
| Abitibi soils determined by 130 | A | xiii | | | |

| | Page | Vol. | | Page | Vol. |
|--|------------|------|---|----------|------|
| Terraces or Beaches. <i>Con.</i> | | | Tetrahedrite. <i>Con.</i> | | |
| Lake Superior, north shore, 112, | | | Cobalt dist. | xi A | xiii |
| 136, 137 | | vi | analysis | 100 A | xiii |
| 134, 147, 150-154 | | viii | | 22 B | xiv |
| | 175 | ix | Coleman tp. | 12, 13 B | xiv |
| Animikie iron range | 288 A | xiv | Determination of | 201 | vi |
| Mica bay | 156 A | xv | Hardness of | 202 | vi |
| Mica bay | 172 | ii | Joachimsthal, Bohemia | 61 B | xiv |
| Photos. | 204, 205 | vii | Madoc tp. | 210 | ix |
| Thunder bay | 109 | vi | Empire mine. | 38 | iv |
| Michipicoten island. | 143 | viii | Notes by Goodman. | 208 | vi |
| Michipicoten div. | 193 | vii | Port Arthur dist. | 55, 58 B | xiv |
| | 211 | x | Silver Islet mine. | 210 | ix |
| | 184 | xi | Specific gravity of. | 202 | vi |
| | 194 A | xv | | | |
| Agawa river. | 131 | viii | Tettix. | | |
| Dog river (near) | 133 | viii | Abitibi dist. | 129 A | xiii |
| Michipicoten river, photo. | 196 A | xv | Tetts, Benjamin. <i>See</i> Tetts mica | | |
| Montreal river. | 173 | ix | mine. | | |
| Mattagami river | 181 | x | John <i>See</i> Tetts mica mine. | | |
| Minnesota. | 202 | v | mica mine, BIRCH LAKE, | | |
| Moose River basin | 147 A | xiii | FRONTENAC CO. | 135 | x |
| Nipigon river | 107, 135 A | xvi | | | |
| Old Woman river (near), alti- | | | "Texas" ss. | | |
| tude | 194 A | xv | Armour of. | 149 | iii |
| Pukaskwa river. | 137 | viii | | | |
| St. Lawrence river. | 227 | x | Texas, U.S. | | |
| Spanish river | 185 | x | Iron ore in | 101-103 | ii |
| Sturgeon river, Th. B. d. | 137 A | xvi | Kaolin in. | 86 | R C |
| Sudbury dist., altitude | 211 | x | Oil in, affects prices | 41 | xi |
| | 103, 104 C | xiv | | | |
| notes by Coleman. | 106 C | xiv | Thaddy (OR TEDDY). | | |
| Thedford (near) | 156 | xii | Gold discovery by, Michipicoten | | |
| Timiskaming lake, notes by | | | div. | 184, 194 | vii |
| Coleman. | 177, 178 | ix | | | |
| Trenton (near) altitude | 222 | x | Thames river, ONT. | | |
| photo. | 224, 225 | x | Limestone quarries on. | 92, 96 B | xiii |
| Turtle river. | 127 | vii | Salt near, thickness of. | 178 | i |
| Warren lake (glacial), altitude .. | 103 C | xiv | Springs along | 55 | i |
| Windigoostigwan lake. | 137 | v | | | |
| Terre Haute. | | | Thamesville, CAMDEN TP., KENT CO. | | |
| Mining school at. | 512 | R C | Brick-yard at, notes. | 73 B | xv |
| Natural gas in | 152 | R C | Oil near | 15 | viii |
| Terrebonne co., QUE. | | | | 42 | xii |
| Grenville series in | 11 | R C | log of well. | 110 A | xiv |
| Terrill, A. G. | 62 A | xiv | production, 1906 | 24 A | xvi |
| Cobalt Mining Co. | | | Tharsis copper mine, SPAIN. | | |
| Capital and date of charter. | 30 A | xvi | Notes on | 372 | R C |
| Terrion, Peter | 47, 50 | x | | | |
| Terry, D. H. | | | Thaulow, J. G. | | |
| Iron ore prospecting, Hutton tp. | 186 | x | Acknowledgments to. | 191 | xii |
| | | | Notes by, on peat experiments | | |
| Tertiary. | | | at Dusseldorf. | 220 | xii |
| Systems in, list of | 543 | R C | stoves. | 227 | xii |
| | | | Ref. to report by, on peat in | | |
| Tesla, Nikola | | | Norway | 196 | xii |
| On water-power | 251, 253 | vii | Thayer, E. H. | 108 | iii |
| Tests for minerals. | | | "Theano" s.s. | | |
| Notes on, by Copp | 449 | R C | Photo of, discharging iron ore at | | |
| Tetapaga lake, TIMAGAMI DIST., NIP. | | | Midland | 17 | x |
| Iron ore near | 201 | x | | | |
| Jaspilite near | 167 | x | Thedford, BOSANQUET TP., LAMBTON | | |
| Tete Jaune Cache, CANOE RIVER, | | | CO. | | |
| B. C. | | | Brick-yard at. | 57 B | xv |
| Beryls at, in a mica deposit. | 237 | vii | notes. | 75 B | xv |
| <i>Tetradium fibratum.</i> | | | Clay at, boulder, photo. | 11 B | xv |
| Marysville. | 41 B | xiii | Erie | 69, 70 B | xiii |
| Tetrahedrite (GREY COPPER). | | | Fossils from, and vicinity. | 154-156 | xii |
| Annaberg, Saxony | 61 B | xiv | | 69 B | xiii |
| | | | Limestone at, analysis. | 69 B | xiii |
| | | | Hamilton. | 25 B | xiii |
| | | | section | 69, 70 B | xiii |
| | | | Shale, analysis | 8 B | xv |

| | Page | Vol. | | Page | Vol. |
|---|------------|------|--|-----------|------|
| Thessalon, Ats. | | | Thomas, U. M. | 122 | vii |
| Agricultural land near..... | 103 | iv | W. | | |
| Beaches at and near, level of..... | 152, 155 | viii | Statistics by, arsenic production, | | |
| Boulder-clay near..... | 156 | viii | Europe..... | 110 | xi |
| Copper mining near, notes by | | | E. Clarke Co. | | |
| Coleman..... | 148 | viii | Oil prospecting by, Zone tp. 21, 22 | vi | |
| See also Bruce Mines dist. | | | -Gilchrist process. | | |
| Geology of dist., report by Cole- | | | Notes on..... | 91 | ii |
| man..... | 158-163 | viii | -Nightingale Pressed Brick | | |
| Gold mining near. See Ophir | | | Co. | | |
| mine. | | | Creation of, 1892..... | 7 | ii |
| Rocks at, conglomerate..... | 185 | ix | tp., Sup. | | |
| grano-diorite, petrography..... | 170 | viii | Soil in, character..... | 132-134 A | xiii |
| Huronian..... | 274-276 A | xiv | Trees in..... | 124 A | xiii |
| Silver mining at..... | 66, 203 | RC | Thompson, A. J. | 72 A | xiii |
| Gold Mg. Co. | | | C. | 144 | x |
| Capital and date of charter..... | 13 | vii | | 75 | xi |
| river, L. Huron. | | | | 67 | xii |
| Gold on..... | 66, 203 | RC | D. S. | 118 | ix |
| Lumbering on..... | 119 | iv | David | | |
| Minor ref. to..... | 202 | v | Description by, of L. Superior, 62, 63 | iii | |
| Rocks on..... | 39 | iii | Indian relics found by, L. Iro- | | |
| Silver on..... | 203 | RC | quois..... | 230 A | xiii |
| prospecting..... | 59 | RC | F. | 118 | ix |
| Waterpower on..... | 252 | vii | | 144 | x |
| Thetford, Que. | | | J. J. | 267 | xi |
| Asbestos in..... | 97 | iii | James (Perth) | 130 | xii |
| mining, notes..... | 246 | i | | 89 A | xvi |
| percentage of water in..... | 76 | iv | James (Sudbury) | 46, 48 | xii |
| Thibadeau, J. A. | | | John J. | 221 | ix |
| Brick-yard of, Pembroke..... | 96 B | xv | Joseph | | |
| clay for, analysis..... | 27 B | xv | Gold prospecting by, L. of the | | |
| Thibault, N. | 105 | viii | Woods..... | 232 | ii |
| | 118 | ix | | 21 | iii |
| | 144 | x | | 169 | v |
| | 75 | xi | Michael | 51 | xi |
| | 66 | xii | Peter | 40, 41 A | xiii |
| Thiel, Allier Dep., France. | | | R. | 118 | ix |
| Lime output from..... | 107 | i | | 144 | x |
| Thies, A. | | | | 75 | xi |
| Assays by, of quartz from Mar- | | | Robert M. | | |
| mora tp..... | 107 | RC | Account by, of "discovery" of | | |
| Thlo, New Caledonia. | | | Orford process..... | 221 | ix |
| Nickel mining near..... | 373 | RC | Evidence by, before Dingley | | |
| | 148, 149 C | xiv | Tariff committee..... | 43 | vi |
| Thirteen-island lake, Bedford tp., | | | Interested in Creighton mine... | 99 | ix |
| Frontenac Co. | | | Massey Station mine..... | 120 | x |
| Feldspar mining near..... | 26 | x | | 267 | xi |
| (See also Bedford tp.)..... | 138 | xii | International Nickel Co. | 22 | xi |
| Iron mining on. See Glendower | | | | 172 C | xiv |
| mine. | | | Inventor of nickel-cheapening | | |
| Minor ref. to..... | 81 A | xiv | process..... | 23 | iv |
| Photo of..... | 82 A | xiv | Ontario smelting works erected | | |
| -Thirty-mile lake, R. R. D. | | | by..... | 19, 21 | xi |
| Boulders south of..... | 174 | vii | Orford works owned by..... | 170 C | xiv |
| Gold near, traces..... | 176 | vii | Samuel | 29 A | xv |
| Rocks on and near..... | 167 | vii | Dr. T. | | |
| Timber near..... | 180, 181 | vii | Bytownite species founded by... | 226 | viii |
| Thirty Years war. | | | William | 44, 50 | x |
| Effect of, on Cobalt mining, | | | Thompson, Alg., So. Dean Lake, | | |
| Saxony..... | 78-85 E | xiv | creek, L. of the Woods. | | |
| Thistle, Canada | | | Notes on..... | 118 | vii |
| Abitibi dist..... | 253 A | xiv | tp., Alg. | | |
| Thomas, H. | 106 | vii | Copper mining in. See Dean | | |
| Josiah | | | Lake. | | |
| Evidence by, re royalties in Corn- | | | Iron prospecting in..... | 97 | vii |
| wall..... | 34, 35 | i | Thomson, A. W. | | |
| Thomas A. | 26, 27 | viii | Gypsum quarrying by, N. Cayuga | | |
| U. H. | 54 A | xvi | tp..... | 111 | i |

| | Page. | Vol. | | Page. | Vol. |
|--|----------|--------|---|-----------|----------|
| Thomson, C. | 144 | x | Three Carrying places, ABITIBI | | |
| G. | 91 | B xiii | RIVER. | 183, 184, | xiii |
| Sheriff | 200 | vi | Friends gold mine, CLEAR- | | |
| island, L. OF THE WOODS, | | | WATER BAY, L. OF THE WOODS. | | |
| R. R. D. | 186 | A | Notes on, 1896. | 49, | vi |
| Thomsonite. | | | Hundred lake, MANITOU LAKE | | |
| L. Superior, N. shore. | 131 | vi | DIST., R. R. D. | | |
| | 210, 211 | ix | Gold mining on. See National | | |
| Mamainse | 194 | ii | mine. | | |
| Thomstown. See Tomstown. | | | Ladies gold mine, CLEAR- | | |
| Thorah tp., ONTARIO CO. | | | WATER BAY, L. OF THE WOODS. | | |
| Limestone in, Trenton | 80 | B xiii | Notes on, 1896 | 49, 252 | vi |
| Peat in. See Beaverton. | | | Portages, ABITIBI RIVER. | | |
| Thorbus, T. O. | 46, 81 | viii | Photo of. | 184, 185 | viii |
| | 76 | ix | Portages, FREDERICK HOUSE | | |
| Thorle, Henry J. | 71, 72 | A xiii | RIVER. | | |
| | 48 | A xv | Serpentine rock at | 211 | A xiv |
| Thornbury, COLLINGWOOD TP., GREY | | | Rivers, CHAMPLAIN CO., QUE. | | |
| co. | | | Bog iron ore of, quality. | 400, 401 | R C |
| Brick-yards at. | 66 | B xv | Iron furnaces at, production | 329 | R C |
| Oil and Mining Co. | | | Thrush, hermit | | |
| Capital and date of charter | 13 | vii | Abitibi dist. | 243 | A xiv |
| Thorne, B. Leonard | | | Wilson's | | |
| Assayer, Great Granite Mg. Co. .. | 60 | ix | Abitibi dist. | 126 | A xiii |
| Manager, | 68 | xiii | Thullen, Louis H. | 123 | x |
| Golden Horne mine .. | 61 | A xiii | Thunder bay, L. SUPERIOR. | | |
| Thorold, THOROLD TP., WELLAND CO. | | | See also Pie island and Prince | | |
| Cement in. | 177 | i | bay. | | |
| | 116, 117 | B xiii | Anthraxolite on. | 6 | Bull. ii |
| works. See Battle, John. | | | | 194 | ix |
| Thorold Hy- | | | Barytes on. | 195 | ix |
| draulic Cement Mills. | | | Copper near, report by Coleman. | | |
| Limestone at, analysis. | 15, 16 | B xiii | | 145-150 | ix |
| Clinton. | 24 | B xiii | with mispickel. | 205 | ix |
| Limestone at, quarries | 119, 120 | B xiii | Marl quarried near. | 170 | A xv |
| section. | 98 | A xiv | Map of portion of. | With | A xv |
| Natural gas at, boring for. | 160, 161 | i | Pectolite on. | 194 | ii |
| log. | 113, 114 | A xv | Quartz crystals on. | 208 | ix |
| Reduction works at, proposed. .. | 12 | A xvi | Rise from, to Loon lake. | 254 | A xiv |
| Silver-plating at. | 131 | i | Rocks on and north of | 37 | R C |
| Hydraulic Cement Mills. | | | | 129, 133 | vi |
| Cement from, for St. Clair tunnel. .. | 107 | i | Animikie. | 31 | R C |
| Notes on, 1890. | 108, 109 | i | | 237 | iv |
| Natural Gas Co. | | | copper-bearing. | 138 | vi |
| Capital and date of charter | 30 | A xvi | Huronian. | 18 | R C |
| tp., WELLAND CO. | | | petrography. | 179, 180 | ix |
| Clay in. See also Port Robinson. | | | sandstone. | 62, 233 | R C |
| Limestone quarrying in | 96 | i | silver-bearing. | 33 | R C |
| Thorpe, F. J. | 72 | xii | trap. | 32 | R C |
| Thousand islands, L. ONTARIO. | | | Silver on, report by Coleman. .. | 145-150 | ix |
| Glaciation on | 226 | x | See also Port Arthur dist. | | |
| Gneisses of | 78 | iv | Steatite on. | 210 | ix |
| Islands station, PRINCE ED- | | | Vesuvianite on. | 211 | ix |
| WARD CO. | | | Zinc-blende on. | 209 | ix |
| Farm land east of | 241 | A xiii | Bay dist. | | |
| straits, U.S. AND ONT. | | | Limestone in, notes by Miller. .. | 111 | B xiii |
| Beaches on, notes by Coleman. .. | 242 | A xiii | Mining lands in, statistics of sales | | |
| Three A silver mine, MAGGREGOR | | | and leases, 1891. | 7, 8 | i |
| TP., THE B. D. | | | 1892. | 7 | ii |
| Cobalt in. | 57 | B xiv | 1893. | 5 | iii |
| Discovery of. | 202 | R C | 1894. | 10 | iv |
| Evidence re, before R. C. | 195 | R C | 1895. | 9 | v |
| Nickel in. | 28, 198 | R C | 1896. | 10 | vi |
| | 57 | B xiv | 1897. | 14, 15 | vii |
| Notes on, by Bell and McKellar. | | | 1898. | 10 | viii |
| | 28, 29 | R C | 1899. | 11 | ix |
| Coleman. | 149, 150 | ix | 1900. | 10 | x |
| Silver in, source of | 35, 36 | R C | 1901. | 12 | xi |
| Veins of, character | 238 | iv | 1902. | 10 | xii |

| | Page | Vol | | Page | Vol |
|--|---------------|------|--|---------------|------|
| Thunder Bay dist. <i>Con.</i> | | | Tilbury tp. (East), KENT CO. | | |
| Mining lands in, statistics of sales and leases. — <i>Con.</i> | | | Oil and gas in | 25 A | xvi |
| 1903 | 36 A | xiii | boring for | 24 A | xv |
| 1904 | 23 A | xiv | map showing | 93 A | xvi |
| 1905 | 24 A | xv | production, 1896 | 24 A | xvi |
| 1906 | 26 A | xvi | report by Knight | 92-106 A | xvi |
| Land and Mg. Co. | | | ref. to | 23, 24 A | xvi |
| Capital and date of charter | 13 | vii | tp. (West), ESSEX CO. | | |
| silver mine, THUNDER BAY, L. SUPERIOR. | | | Oil and gas in. <i>See also</i> Comber. | | |
| Evidence <i>re</i> , before Roy. Com. ... | 195, 198 | R C | log of well | 117 A | xiv |
| Notes on, by Bell | 34 | R C | Salt well in, log | 186 | R C |
| Trap beds in | 36 | R C | Tilden—? | 132 | vii |
| Silver Mg. Co. | | | Tildon, John H. | 29 | iv |
| Capital and date of charter | 13 | vii | | 46 | v |
| cape, THUNDER BAY, L. SUPERIOR. | | | Tiles. | | |
| Altitude of | 62 | iii | Canada, production, 1887 | 213 | R C |
| | 138 | vi | Devonian shale used for | 75 B | xv |
| Beaches near | 138 | vi | Making of, notes on | 116 B | xv |
| Laccolithic sills at | 256 A | xiv | Shale for, Thedford | 70 B | xiii |
| Rocks at | 133, 134, 139 | vi | <i>See also</i> Brick-clay. | | |
| Animikie, thickness | 124 | ix | Statistics of, 1886-87 | 243 | R C |
| basalt | 62 | iii | 1891 | 6 | i |
| Keweenawan | 257 A | xiv | 1892 | 7, 11 | ii |
| | 169 A | xv | 1893 | 7, 10 | iii |
| trap | 37 | R C | 1894 | 11 | iv |
| | 15 | v | 1895 | 11, 12 | v |
| Cape mt., THUNDER BAY, L. SUPERIOR. | | | 1896 | 12, 13 | vi |
| Norway pine on | 146 | vi | 1897 | 15, 17 | vii |
| Notes on, by Coleman | 110 | vi | 1898 | 11, 12 | viii |
| hill, MICHIPICOTEN RIVER, ALG. | | | 1899 | 12, 13 | ix |
| Description of | 191 | vii | 1900 | 11, 12, 14 | x |
| lake, NEAR DRYDEN, R. R. D. | | | 1901 | 12, 13, 30 | xi |
| Iron ore on | 136 | xi | 1902 | 12, 13, 27 | xii |
| petrographical notes | 143 | xi | 1903 | 2, 4, 15 A | xiii |
| Thundering-water falls, MISSISSAUGA RIVER. | | | 1904 | 1, 3, 16 A | xiv |
| Drop of | 145 A | xiii | 1905 | 4 A | xv |
| Photo of | 176, 177 A | xiii | 1906 | 6 A | xvi |
| Thurber, George Robert | 29, 60 | ix | United States, 1887 | 213, 229 | R C |
| | 79 | x | Tilken iron mine, GOORBIE RANGE, U.S. | 146 | iii |
| | 58 A | xv | Tifle lake, L. OF THE WOODS REG., R. R. D. | | |
| Philip | | | Gold mining on. <i>See</i> Nino mine. | | |
| Nickel exhibited by, 1853 | 165 C | xiv | Tilly Foster mine, N. Y. | | |
| Thurlow tp., HASTINGS CO. | | | Magnetic concentration at, notes | 325, 338, 340 | xii |
| Cement works in | 33 | xii | Tilson, George (1820) | 320 | R C |
| | 19 B | xiii | | 13 | ii |
| Clay in, analysis | 19 B | xiii | Tilsonburg, DEREHAM TP., OXFORD CO. | | |
| Limestone in | 19 B | xiii | Artesian wells in | 61, 62 | i |
| Meteorite in | 203 | ix | Oil in | 91 B | xiii |
| Thurston, Robert H. | | | Oil and Gas Developing Co. | | |
| Analysis of fuels given by | 184 | i | Capital and date of charter | 11 | xi |
| Notes by, on calorific power of fuels | 186 | i | Timagami, Nip. | | |
| <i>Thym occidentalis.</i> <i>See</i> Cedar. | | | Iron ore near | 49 A | xvi |
| Tides. | | | compared to that of Boston tp. | 262 A | xiv |
| L. Superior, north shore | 147 | viii | Mispickel near, analysis | 23 B | xix |
| Tiffin, Ohio. | | | dist., Nip. | | |
| Natural gas in | 123 | i | Regional disturbances in, sketch map showing | 34, 35 B | xix |
| depth and pressure | 155 | i | Report on, by Miller | 160-180 | x |
| Tigris river, ASIA MINOR | 166 | i | Forest reserve. | | |
| Tilbury, E. TILBURY TP., KENT CO. | | | <i>See also</i> Montreal River Mg. div. | | |
| Gas piped to | 99 A | xvi | Creation of | 36 A | xvi |
| Minor ref. to | 22 A | xvi | Description of | 46, 47 A | xvi |
| | | | Iron ore in | 16 A | xvi |

| | Page. | Vol. | | Page. | Vol. |
|---|--------------------|------|--------------------------------------|--------------------|------|
| Timagami Forest reserve. — <i>Con.</i> | | | Timber. — <i>Con.</i> | | |
| Mining restrictions within | 2 A | xiii | As an indication of iron ore | 465 | R C |
| Silver in | 8 A | xvi | Big river, Opasatika river | 256 | v |
| island, TIMAGAMI LAKE, NIP. | | | Blanche river and vicinity | 215 | xi |
| Magnetite on, analysis | 169 | x | | 173-183 | xii |
| lake, NIP. | | | Fort Frances | 161 | v |
| Agricultural land on and near | 56-58 | R C | Gypsum mt. | 158 A | xiii |
| Ancient outlets of | 202 | v | Hinterland, The | 119 | iv |
| Beauty and depth of | 203 | v | Hudson Bay slope | 176 A | vi |
| Compared with Larder lake | 204 A | xvi | Kenogami river | 112 | iv |
| Copper on | 56 | R C | Lac Seul, Ont. and Kee | 61, 62 | v |
| Fauna of district of | 58 | R C | Lake Huron slope | 169, 170 | vi |
| Fish in | 100 | x | McKonkey tp. | 171 | ix |
| Galena near | 56 | R C | Matawin river | 132 | v |
| | 175 | i | Mattagami River dist. | 128-130 | ix |
| Geology of | 172-175 | x | | 181, 182 | x |
| Glacial striae near, direction | 178 | ix | | 122 A | xiii |
| Gold on | 26, 56 | R C | | 188-195 A | xiv |
| Graphite on | 168 | x | | 118-128, 137-153 A | xv |
| Iron ore in region of | 22 | R C | Michipicoten div. | 13 Bull. | iii |
| | 100, 201 | x | | 189, 206 | vii |
| | 20 | xii | | 200 A | xv |
| | 8 A | xiii | | 295, 296 A | xiv |
| boring for | 31, 78 A | xiv | Mamainse pen. | 72 | iii |
| | 26 A | xv | Montreal river | 130, 200 | viii |
| | 30 B | xiv | Michipicoten island | 61 | R C |
| character | 308 | xii | Mining lands, law regarding | 226 | ix |
| hematite | 56 | R C | Mississagi River dist. | 159-167, 172 | xii |
| | 15 A | xv | Montreal River basin | 173 | vi |
| jaspery | 168, 169, 183, 185 | ix | Moose River basin | 176, 177 A | xiii |
| map showing claims | 316 | xii | New Ontario, notes by Blue | 205 | v |
| tests on | 336 | xii | Nipigon Lake region | 111, 112 | iv |
| Iron pyrites near | 56 | R C | | 212 | x |
| | 207 | ix | | 111, 138 A | xvi |
| | 149, 150 A | xvi | Niven's base line, Alg. and S. of | 141 | ix |
| Minerals on and near, notes by | | | Pigeon River dist. | 116, 147 | ix |
| Haycock and Bailey | 56-58 | R C | Port Arthur and vicinity | 114 | ii |
| Notes on, by Bell | 15 | R C | Rainy River dist. | 65 | R C |
| Pyrrhotite near | 145 C | xiv | | 180-182 | vii |
| Report, by Coleman, on dist. | | | Rainy Lake region | 95 | iv |
| N. E. of | 172-174 | ix | river | 117 | iv |
| | 73 | i | | 207, 208 | v |
| Rocks on and near:— | | | Seine river | 149-155 | v |
| argillites, as ornamental stone | 93 | i | | 74 | vi |
| arkose and gneissic | 69, 74 | i | Wabigoon Lake region | 172 | vii |
| crystalline schists | 71 | i | Savant lake | 88 | xii |
| feldspathic quartzites | 72 | i | Shebandowan Lake region | 79, 117 | v |
| greenstones | 75 | i | Spanish river | 125 | ix |
| Huronian | 20 | R C | Speight's meridian line, E. of L. | | |
| | 71 | i | Superior | 199-203 | viii |
| Keewatin | 30 B | xiv | Sweden, for charcoal making | 396 | R C |
| metamorphism of | 38 B | xiv | Timagami dist. | 56-58 | R C |
| slates | 73 | i | | 161 | x |
| roofing | 56 | R C | White Bear lake | 174 | ix |
| | 168 | i | | | |
| Timber on | 58 | R C | Timiskaming and Northern Ont- | | |
| | 100 | x | ario R'y. | | |
| pine | 119 | iv | Cobalt discoveries due to | 96 A | xiii |
| Mt. and Milling Co. | | | | 9 B | xiv |
| Work by, at Net lake | 87, 88 A | xv | Clay deposits to be opened by | 17 A | xiii |
| river, STURGEON RIVER, L. NIP- | | | Extension of, projected | 9 A | xiii |
| ISSING. | | | Iron ore along | 263 A | xiv |
| Lead ore on | 147 | R C | Route of, notes on | 34, 35 B | xiv |
| Timber. | | | lake, NIP. | | |
| Abitibi dist | 180, 181, 193 | viii | Agricultural land on and near | 103 | iv |
| | 196-207, 249-251 A | xiv | | 206 | v |
| | 125, 127 A | xv | notes by Coleman | 177, 178 | ix |
| Black river | 184-188 | xii | Altitude of | 178 | ix |
| Night-hawk lake | 176 | viii | Beaches on, notes by Coleman | 177, 178 | ix |

| | Page. | Vol. |
|---|-------------|------|
| Timiskaming lake. — <i>Con.</i> | | |
| Colorado beetle known near..... | 107 | iv |
| Clay on, analysis..... | 26, 27 B | xv |
| Saugeen..... | 18 B | xa |
| Country between and height-of-land, report by Miller..... | 214-230 | xi |
| Galena on, auriferous..... | 67 | rc |
| mining..... | 230 | xi |
| <i>See also</i> Wright silver mine. | | |
| Geology of country S. of, paper by Bell..... | 63-94 | i |
| Glacial striae on, direction..... | 178, 179 | ix |
| Iron ore near..... | 12 A | xiv |
| specular..... | 142 | rc |
| Jaspilite north of..... | 178 | x |
| Lithographic stone on..... | 6 B | xiii |
| Moose east of..... | 162 | x |
| Notes on, by Coleman..... | 172 | ix |
| Railway to, from North Bay, suggested..... | 179 | x |
| Report, by Coleman, on dist. W. and E. of..... | 172-174 | ix |
| Rocks on and near: | | |
| basal conglomerate..... | 185 | ix |
| breccia, photo..... | 45 B | xiv |
| granite..... | 84 | i |
| Huronian..... | 17-20 | rc |
| 158 | | viii |
| 41, 48, 49 B | | xiv |
| Keewatin..... | 30 B | xiv |
| photo..... | 42, 43 B | xiv |
| limestone, fossiliferous..... | 85, 86 B | xiii |
| Niagara..... | 41 | rc |
| 204 | | v |
| 6, 22 B | | xiii |
| Silurian..... | 165 | x |
| notes by Logan..... | 41 B | xiv |
| slates..... | 47 B | xiv |
| Silver on, E. side. <i>See</i> Wright mine. | | |
| W. side. <i>See</i> Cobalt dist. | | |
| Smaltite with bismuth near..... | 28 B | xiv |
| Timber west of..... | 118, 120 | iv |
| Mining division. | | |
| Description of..... | 37 A | xvi |
| Formation of..... | 38 A | xv |
| 36 A | | xvi |
| Timmins, Noah | | |
| Acknowledgments to..... | 40 A | xiv |
| Manager, La Rose Mg. Co..... | 73 A | xv |
| Part owner, La Rose mine..... | 5 A | xiv |
| Timothy. | | |
| Garden River, near..... | 197 | viii |
| Michipicoten div..... | 13 Bull. | iii |
| 206 | | vii |
| island..... | 144 | viii |
| Pigeon River dist..... | 146 | ix |
| Rainy Lake dist..... | 165 | v |
| Wanapitei Lake dist..... | 137 | vii |
| Tin. | | |
| <i>See also</i> Cassiterite. | | |
| Alloys of, antiquity of..... | 381 | rc |
| Beryl and Columbite associated with..... | 234, 236 | vii |
| Cornwall, Eng..... | 31, 35, 173 | i |
| for "salting" in Byron tp., | 139 | viii |

Tin.—*Con.*

| | | |
|---|----------------|------|
| Marmora dist..... | 36 | iv |
| Michipicoten div., notes on "salting" (1872)..... | 138, 139 | viii |
| Prospecting for, hints on..... | 458, 459 | rc |
| Straits Settlements..... | 43 | i |
| Sudbury dist..... | 59 | rc |
| Vermillion river..... | 190 | ii |
| 36 | | iv |
| Tasmania, absence of royalty on..... | 45 | i |
| plate. | | |
| Canadian imports of, 1881-87..... | 248, 254 | rc |
| works. | | |
| Statistics of, 1881..... | 116 | ii |
| Tinguaite. | | |
| Analysis of, various localities..... | 189 | ix |
| Tip= top copper mine, (K 65 loc.). | | |
| ROUND LAKE, E. OF MOSS L., TH.B.D. | | |
| Assay map of..... | 174 A | xvi |
| Camp of, photo..... | 128, 129 | xi |
| Gold in..... | 81 | xii |
| Gossan from, analysis..... | 186 A | xvi |
| Mining class at..... | 53-56 A | xiii |
| Minor ref. to..... | 7 A | xiii |
| Notes on, 1899..... | 86 | ix |
| 1901..... | 275, 276 | xi |
| 1902..... | 101, 102 | xii |
| 1903..... | 77, 78 A | xiii |
| 1906..... | 61, 172, 173 A | xvi |
| Notes on, by Blue..... | 118 | v |
| Coleman..... | 75 | v |
| Photos of..... | 80, 81 A | xiii |
| Producing, 1906..... | 15 A | xvi |
| Prospecting on, 1905..... | 61 A | xv |
| Smelter at, suggested..... | 59 A | xiii |
| Sulphide deposits in..... | 11 A | xiv |
| Copper Mg. Co. | | |
| Capital and date of charter..... | 9 | x |
| mt., NEAR WHITE SPRUCE HARBOUR, L. SUPERIOR. | | |
| Altitude of..... | 150 | viii |
| 281 A | | xiv |
| Glacial striae on, direction..... | 157 | viii |
| Notes on, by Coleman..... | 142 | viii |
| Rocks in vicinity of..... | 134 | viii |
| Tires. | | |
| For locomotives. <i>See</i> Locomotives. | | |
| Tisdale, Lieut. Col. D. | | |
| Gold mining by, Michipicoten div..... | 106 | vii |
| 101, | | viii |
| 105 | | viii |
| W. E..... | 106 | vii |
| 105 | | viii |
| tp., ALG. | | |
| Beaver dams in..... | 127 A | xiii |
| Soil and trees in..... | 121, 133 A | xiii |
| Titaniferous iron ore (MENACANTITE). | | |
| <i>See also</i> Ilmenite. | | |
| Glamorgan tp..... | 62 | ii |
| Hastings dist..... | 45, 49, 51 | ii |
| Iron from, of superior quality..... | 231 | vii |
| Murray mine, Sudbury dist..... | 281 | xii |
| 162 C | | xiv |
| St. Francois, Que..... | 246 | rc |
| Seely Bay, near, notes..... | 230, 231 | vii |
| 229 | | viii |

| | Page. | Vol. | | Page. | Vol. |
|---|------------------|----------|--|-------------|----------|
| Titaniferous iron ore. — <i>Con.</i> | | | Topaz. | | |
| Smelting of, notes by Blue..... | 89-91 | ii | Description of..... | 228 | vi |
| Vanadium in..... | 233 | vii | Hardness and specific gravity of..... | 448 | 535 R C |
| Titanite or Spheue. | | | | 203 | vi |
| Abitibi river, Alg..... | 185 | viii | | 214 | vii |
| Apatite dists..... | 438-442 | R C | Topeka, KAN. | | |
| Burgess, N. tp..... | 242 | viii | Section of arch construction at..... | 178 | A xiv |
| Definition of..... | 544 | R C | Top-of-the-Rock, MARYSBURG TP., | | |
| Egansville, notes..... | 209 | ix | PRINCE EDWARD CO. | | |
| Exhibit of, at Worlds' Fair..... | 189 | ii | Beaches at..... | 240 | A xiii |
| Hardness of..... | 202 | vi | Topography. | | |
| Notes on, by Goodwin..... | 227 | vi | Abitibi dist..... | 115, 116 | A xiii |
| Kunz..... | 211 | ix | | 185-187 | A xiv |
| Specific gravity of..... | 202 | vi | Hastings corundum dist..... | 220 | vii |
| Titanium. | | | | 209, 210 | viii |
| In iron ores, Black bay, L. Superior..... | 189 | v | Larder Lake dist..... | 203, 204 | A xvi |
| effect of..... | 467 | B C | Michipicoten div..... | 153, 154 | xi |
| | 88, 89 | ii | | 281, 282 | A xiv |
| | | 9 A xiii | Mississagi River dist..... | 158 | xii |
| Moisie, Que..... | 189 | v | New Ontario, notes by Blue..... | 201-204 | v |
| Titley and Frost. | | | Sudbury dist..... | 236-238 | xii |
| Brick-making by, Carlton West..... | 107 | B xv | | 4, 5 | C xiv |
| Titusville, CRAWFORD CO., PA. | | | Northern Nickel range..... | 192 | A xiii |
| Gas at..... | 157 | i | Timagami dist..... | 161, 162 | x |
| Toad. | | | Windigokan Lake dist..... | 138 | A xvi |
| Abitibi dist..... | 127 | A vii | Torbolton tp., CARLETON CO. | | |
| river, L. SUPERIOR | | | Cambro-Silurian in..... | 38 | B xiii |
| Terraces at mouth of, photo..... | 204, 205 | vii | Torf mull. See Moss litter. | | |
| Tobacco. | | | Toronto. | | |
| L. of the Woods..... | 105 | vi | Adamant mills in..... | 112 | i |
| Moose Factory..... | 107 | iv | Agricultural land near..... | 198 | v |
| Tobermory, ST. EDMUNDS TP., | | | Beach at..... | 230, 236 | A xiii |
| BURCH CO. | | | Blast furnace at, suggested..... | 394 | R C |
| Magnesian limestone near..... | 37 | B xiii | | 114-116 | ii |
| lake, GREY CO. | | | Bricks at, clay for..... | 104 | i |
| Marl from..... | 150 | A xiv | | 126 | iii |
| Tobin, F. | | | analyses..... | 114 | B xv |
| J..... | 75 | xi | description..... | 107 | B xv |
| Todd, G. | | | price..... | 15 | A xiii |
| J. A..... | 75 | xi | output, 1888..... | 72 | R C |
| | 67 | xii | yards, description and | | |
| Toe-nail hill, TORONTO. | | | photos..... | 48, 107-114 | B xv |
| <i>Tofieldia glutinosa.</i> | 127 | iii | Boiler-covering (mica) factory | | |
| Mattagami valley..... | 150 | A xv | at..... | 32 | v |
| " <i>palustris</i> | | | Coal falsely reported at..... | 203 | ii |
| Abitibi Lake dist..... | 241 | A xiv | used in waterworks at, an- | | |
| Togue. See Trout, lake | | | alysis..... | 4 | Bull. ii |
| Tohorsky, Mytro. | | | Court-house of, building-stone | | |
| Evidence by, before R. C. p. 7— | 35 | A xvi | for..... | 99 | i |
| salt, duties on..... | 236 | R C | Gas in dist. of..... | 4, 138, | i |
| Kincardine..... | 184, 189 | R C | boring for..... | 126 | B xiii |
| Tolson, J. H. | | | compared to acetylene..... | 40 | v |
| Tomatoes. | 106 | vii | Geological museum at, facilities | | |
| Mentioned as growing at :— | | | for..... | 412 | R C |
| Lake of the Woods..... | 105 | vi | Gravel bars at..... | 227 | x |
| Lac Seul..... | 62 | v | Hudson River shales at..... | 4 | i |
| Tonkin, Colon | 25, 96, 275, 280 | viii | Mining school at, advisability of. | 423 | R C |
| Tonstrom, Charles | 12, 50 | x | See also School of Practical | | |
| Toomah bay, BELFORD TP., FROST- | | | Science. | | |
| TEXAS CO. | | | Name of, changed..... | 196 | v |
| Pyroxene on..... | 207 | ix | Oil near, boring for..... | 126 | B xiii |
| | | | Petalite found at, in a boulder.. | 194 | ii |
| | | | | 206 | ix |
| | | | Streets of, asphalt and cedar for. | | |
| | | | | 105, 106 | iii |
| | | | cost of..... | 14 | v |
| | | | vitrified brick for.... | 17 | v |

| | Page | Vol | | Page | Vol |
|--|----------|--------|---|----------|--------|
| Toronto and Hamilton Sewer Pipe Co. | | | Toronto Street Railway. | | |
| Fire at plant of..... | 19 | A xvi | Tests by, on Dickson peat process..... | 201 | i |
| Minor ref. to..... | 29 | xii | tp., Penn. co. | | |
| Notes on, 1906..... | 116 | B xv | Brick works in..... <i>See</i> Port Credit, | | |
| and Western Mines Dev. Co. | | | clay for..... | 85 | R C |
| Capital and date of charter..... | 13 | viii | Toronto-Tudor Mg. Co. | | |
| Work by, Lake of the Woods, | | | Capital and date of charter..... | 13 | vii |
| 1897..... | 131 | vii | Toronto Vitrified Paving Brick and | | |
| 1898..... | 67, 90 | viii | Stone Co. | | |
| 1899..... | 56, 57 | ix | Property of, notes on..... | 127 | iii |
| and Whitby Mg. Co. | | | Torrance, David..... | 137 | R C |
| Capital and date of charter..... | 13 | vii | 39, 97..... | vi | |
| Cobalt Mg. Co. | | | John F. | | |
| Capital and date of charter..... | 26 | A xv | Gold mining by, R. R. d..... | 227 | iv |
| Fire Brick Co. | | | Graphite mining by, Renfrew co. | 196 | iii |
| Analysis of shale used by..... | 8 | B xv | 26..... | xii | |
| Works of, Mimico, notes and | | | Gypsum mining by, Brantford | | |
| photos..... | 110, 111 | B xv | tp..... | 281 | v |
| Gold Mg. Co. | | | Torsion tests. | | |
| Capital and date of charter..... | 13 | vii | On iron, notes by Riley..... | 385 | R C |
| Toronto-Hamilton Portland Ce- | | | Tory Hill, Monmouth tp., Hall- | | |
| ment Co. | | | BURTON CO. | | |
| Capital and date of charter..... | 37 | A xiii | Syenite near..... | 216 | viii |
| Toronto Iron Co. | | | Totten, Henry <i>See</i> Totten nickel mine. | | |
| Capital of..... | 181 | R C | J. W..... | 108 | vii |
| island, LAKE ONTARIO. | | | Hogg & Co..... | 120 | ii |
| Formation of..... | 237 | A xiii | nickel mine, DENISON tp., ALB. | | |
| Gravel bars at..... | 230 | A xiii | Rocks in..... | 30 | C xiv |
| Junction, YORK tp., YORK CO. | | | Work at, 1906, notes on..... | 67 | A xvi |
| Merrifield gas generator work- | | | Touchette, J..... | 75 | xi |
| ing at..... | 231, 232 | xii | 67..... | xii | |
| Vitrified brick made at..... | 129 | iii | 48 | A xiii | |
| Lime Co. | | | Touchstone. | | |
| Analysis of marl and limestone | | | Definition of..... | 224 | vi |
| used by..... | 183 | A xiv | Tough, Robert J. | | |
| Cement and lime works by..... | 108, 109 | i | Nickel mining by, Levaek tp..... | 274 | v |
| 32..... | xi | | <i>See also</i> Stobie nickel mine. | | |
| 28, 31..... | xii | | W..... | 106 | vii |
| 18 | A xiii | | and Stobie nickel mine. <i>See</i> | | |
| 18 | A xv | | Stobie nickel mine. | | |
| Plant of, notes and photo..... | 165 | A xiv | Tourists. | | |
| Marble Co. | | | As cause of forest fires..... | 177 | A xiii |
| Gypsum used by, for marble..... | 280 | vi | Tourmaline. | | |
| Mining Association, Ltd. | | | Apatite districts..... | 442 | R C |
| Capital and date of charter..... | 13 | vii | Boerth gold mine..... | 203 | xi |
| Mg. and Exploring Co. | | | Determination of..... | 205 | vi |
| Capital and date of charter..... | 13 | vii | Description of..... | 544 | R C |
| Nickel Co. | | | Elmsdale (near), mistaken for | | |
| Capital and date of charter..... | 13 | vii | coal..... | 172 | ix |
| Peat Fuel Co. | | | Exhibited at World's Fair..... | 189 | ii |
| Experiments by, on peat plant..... | 32 | A xiii | Hardness of..... | 202 | vi |
| Formation of..... | 28, 37 | A xiii | Kaladar tp..... | 238 | vii |
| Portland Cement Co. | | | Golden Fleece mine..... | 203 | xi |
| Capital and date of charter..... | 11 | xi | Lyndoch tp..... | 237 | vii |
| Pottery Co. | | | Notes on, by Goodwin..... | 228 | vi |
| Capital and date of charter..... | 24 | A xiii | Occurrences of..... | 211 | ix |
| Pressed Brick and Terra | | | Ross tp..... | 190 | ii |
| Cotta Co. | | | St. Gothard mnt., Switzerland..... | 241 | viii |
| Notes on..... | 103 | ii | Specific gravity of..... | 202 | vi |
| by Hewson Murray..... | 85 | R C | Utoe island, Sweden..... | 472 | R C |
| Brick and terra-cotta supplied by..... | 29 | xii | Tourmaline schist. | | |
| 120..... | B xv | | Loon portage, Mattagami river..... | 134 | A xv |
| Plant and quarry of, photos..... | 9, 67 | B xv | Toussaint. <i>See</i> Weesian, Toussaint | | |
| section..... | 78 | R C | Tower, VERMILION LAKE, U. S. | | |
| Sand Lime Brick Co. | | | Iron ores of..... | 120, 22 | R C |
| Capital and date of charter..... | 26 | A xv | notes by Coleman..... | 152, 153 | ix |
| Smelting Co. | | | Merritt..... | 124, 125 | R C |
| Arsenic making by, at Madoc..... | 288 | viii | width of beds..... | 114 | R C |
| | | | Stage from, to Mine Centre..... | 49 | viii |

| | Page. | Vol. | | Page. | Vol. |
|--|----------|------|--|----------|--------|
| Tower of Babel. | 161 | i | Trap. — <i>Con.</i> | | |
| | 107 | iii | Nipigon bay, photo of castellated cliff | 112 | A xiii |
| Towers, T. A. P. | | | Ottawa co., Que., dikes of | 437 | R C |
| Evidence by, before R.C. re Gov- | 425 | R C | Travers, Morris W. | | |
| ernment aid to mining | 309 | R C | Calcic carbide made by | 144 | iv |
| Mining laws | 60 | R C | Ref. to paper by, on fergusonite. | 236 | vii |
| Sault Ste. Marie dist. | 118 | ix | R. | 118 | ix |
| Mining by, Michipicoten div. | 144 | x | | 48 A | xiii |
| Townley, W. B. | 118 | ix | R. P. | | |
| Townshend—? | | | Managing Director, Inez nickel mine | 190 | iii |
| Copper mining by, L. Superior. | 209 | v | | 276 | vi |
| (1774) | 190 | iii | | 91 | vii |
| E. S. | | | Mine of, idle, 1894 | 249 | iv |
| T. B. & Co. | | | 1895 | 273 | v |
| Analysis of shale used by, Zanesville | 119 | iii | <i>See also</i> Inez mine. | | |
| Townsend tp., NORFOLK CO. | | | Thos. | | |
| Fossil corals in | 142 | xii | Acknowledgments to | 61 | xi |
| Gravels in, stratified. <i>See</i> | | | Manager, Creighton mine | 64 A | xv |
| Waterford. | | | Gertrude mine | 99 | ix |
| Limestone quarrying in. <i>See</i> | | | | 65, 281 | xi |
| Villanova. | | | | 123 | xii |
| Oriskany formation in | 153 | xii | | 87 A | xiii |
| Townships. | | | Inez mine. | 232 | i |
| Curious names of early | 15 | ii | | 276 | vi |
| Growth of | 136 | iv | Work by, at Murray mine | 93 | vii |
| Townsley, G. S. | | | | 93 | vii |
| Brick producing, 1902 | 28 | xii | Travers nickel mine. <i>See</i> Inez nickel mine. | | |
| Toynbee, Arnold | | | Traverse City Gold Reef Co. | | |
| Data by, re iron imports of Gt. Britain | 357 | R C | Capital and date of charter | 25 A | xvi |
| Trachyte. | | | Travertine. | | |
| Description of | 544 | R C | Oneida tp. | 211 | ix |
| | 235 | vi | Paris, Ont. | 34 B | xiii |
| Tracy, Gen. B. F. | | | <i>Trarinnusambucifolia.</i> <i>See</i> Ash, black | | |
| Nickel steel adopted by, for U.S. Navy | 170 C | xiv | Traynor, Isaac | 139 | viii |
| Photo of | 171 C | xiv | Treadwell gold mine, ALASKA. | | |
| Report by, on armour plate trials | 136-138 | ii | Character of deposit | 119 | vi |
| Tests by, on nickel-steel | 185 | iv | Gold contents, average | 82 | v |
| Trading Companies. | | | Rock of, petrography | 27 | R C |
| History of, in Canada | 196-201 | v | Treasure gold mine, NEAR ROSSLAND, R. R. D. | | |
| Trafalgar, Battle of. | 164 | i | Depth of, 1899 | 35 | ix |
| bay, ANZHEKUNMING LAKE, R. R. D. | | | Notes on, 1892 | 231, 235 | ii |
| Gold mining on | 76 | vii | 1894 | 227 | iv |
| <i>See also</i> Neepawa gold mines. | | | 1899 | 38 | ix |
| tp., HALTON CO. | | | by Blue | 30 | iii |
| Iroquois beach in. <i>See</i> Oakville. | | | Rocks in | 69 | iv |
| Tralee, KERRY CO., IRELAND. | | | Treaty island, L. OF THE WOODS, R. R. D. | 13 | iii |
| Price of peat in (1890) | 189 | i | | 187 | v |
| Transcontinental Railway. | | | Treaty of Ghent. | | |
| Prospects of, 1903 | xi A | xiii | Boundary line, Canada and U. S. defined by | 108, 192 | v |
| Transvaal, S. AFRICA. | | | Trees. <i>See</i> Timber. | | |
| Cobalt in | 70 B | xiv | Tregoning, Archelaus | 178 | ii |
| Trap. | | | John | 173 | ii |
| Bruce Mines, for road metal | 13-16 | v | Trelawney mine, St. Ives, ENG-LAND | 411 | xi |
| | 125, 169 | viii | Tremblay, George (Snr.) | 167, 171 | iii |
| Definition of | 544 | R C | George (Jnr.) | 171 | iii |
| | 14 | v | Joseph | 65, 67 | xii |
| Distribution of | 15 | v | | 47 A | xiii |
| Lake Superior, north shore | 130-136 | vi | Trembley, MICHIPICOTEN DIV. | | |
| Mamainse pen | 77-80 | iii | Pleistocene deposits at | 184 | xi |
| Lake of the Woods, plan showing alternation with granite | 61, 65 | viii | C. | 141 | x |

| | Page. | Vol. | | Page. | Vol. |
|---|--------------------|--------|--|----------|--------|
| Trembley, J. | 106 | vii | Trenton formation. — <i>Con.</i> | | |
| | 105 | viii | Russell co. | 107, 108 | B xiii |
| | 118 | ix | Simcoe co. | 109, 110 | B xiii |
| | 144 | x | Lake Simcoe | 90 | B xiii |
| | 75 | xi | Stormont co. | 110, 111 | B xiii |
| | 67 | xii | United States | 116, 117 | i |
| | 48 | A xiii | natural gas in | 151, 152 | R C |
| Trembly farm, E. Tilbury tp. | 103 | A xvi | Trenton, N. Y. | 41 | R C |
| Tremolite (RAPHILITE). | | | Victoria co. | 112 | B xiii |
| Definition of. | 544 | R C | York co. | 126 | B xiii |
| Exhibited at World's Fair. | 188 | ii | Mimico and Toronto. | 139 | i |
| Hardness of | 202 | vi | Granite and Marble Co. | | |
| Occurrences of. | 208, 211 | ix | Working near Bancroft | 82 | A xvi |
| Specific gravity of. | 202 | vi | Tres Puntas, CHILL. | | |
| Trent Bridge, SEYMOUR TP., NORTH- | | | Smallite in silver mines of | 72 | B xiv |
| UMBERLAND CO. | | | Tressider steel process. | | |
| Iroquois beach near. | 227 | A xiii | Notes on. | 153-156 | iii |
| canal, NORTHUMBERLAND CO. | | | Trethewey, A. | 59 | xii |
| Hydraulic lift-lock at, photo. | 16 | B xiii | George H. | 94 | ix |
| Portland cement works on. | 31 | xii | Richard | 155-157 | vi |
| Waterpower from. | 149 | A xiv | Thomas | 201, 214 | iv |
| river, NORTHUMBERLAND CO. | | | Thomas Henry | | |
| Ancient valley of | 231 | A xiii | Copper mining by, Mamainse | | |
| Beaches north of | 232, 236 | A xiii | pen. | 102 | R C |
| Limestone on, fossiliferous. | 88 | B xiii | | 130, 241 | ii |
| Valley Peat Fuel Co. | | | | 72 | iii |
| Intelligent enterprise of. | 114 | x | | 240 | iv |
| Peat bog of, notes. | 209 | xii | Evidence by, before Royal Com. | | |
| Plant of, notes. | 219 | xii | <i>re:—</i> | | |
| Merriemfield generator at | 231 | xii | East Silver Mt. mine. | 194, 201 | R C |
| Notes on, 1899. | 21, 22 | ix | Free trade | 232 | R C |
| Trenton. | | | Mamainse minerals | 102 | R C |
| Beaches near. | 231, 235, 239, 240 | A xiii | Mining laws and schools | 312, 427 | R C |
| altitude | 222 | x | Want of railways | 240 | R C |
| | 234, 235 | A xiii | Manager, Wellington mine. | 125 | viii |
| photo. | 224, 225 | x | W. G. | | |
| Gravel pit in esker at, photo. 224, 225 | | x | Acknowledgments to. | 17 | B xiv |
| Trenton formation in. | 89 | B xiii | Owner, New Ontario mine. | 5 | A xiv |
| Trenton, N. Y. | | | <i>See also</i> Coniagas silver mine. | 7, 74 | A xv |
| Trenton formation named after. . | 41 | R C | W. J. | 51 | x |
| formation. | | | Silver Cobalt Co. | | |
| Cement from | 106 | i | Capital and date of charter | 31 | A xvi |
| | 27, 37, 40, 46, 48 | B xiii | Dividend, 1906-7. | 13 | A xvi |
| Character and distribution. | 41, 42 | R C | silver mine, COBALT. <i>See</i> New | | |
| Frontenac co. | 44 | B xiii | Ontario silver mine. | | |
| Hastings co. | 59 | B xiii | Triassic. | | |
| Marmorata tp. | 137 | iii | Definition of | 544 | R C |
| Lake Huron | 93 | i | Tribute mining. | | |
| Manitoulin island | 75, 76 | B xiii | Explanation of. | 94 | R C |
| Little Current | 85 | R C | <i>Trientalis americana.</i> | | |
| | 86 | i | Abitibi Lake dist. | 241 | A xiv |
| quarried. | 74, 84 | R C | Mattagami valley | 150 | A xv |
| thickness. | 72, 73 | A xv | <i>Trifolium repens.</i> | | |
| St. Joseph island | 79 | B xiii | Abitibi Lake dist. | 242 | A xiv |
| Lambton co., Petrolia, height | | | Triggs, J. H. | | |
| above tide level. | 113 | A xv | <i>See also</i> next ref | | |
| Lanark co. | 70 | B xiii | Manager, Triggs gold mine. | 63, 64 | viii |
| Lennox co., Napanee, cement in. | 109 | i | | 44 | ix |
| Montreal section of | 97 | A xiv | Notes by, on same | 72 | x |
| Nipissing dist. | 84 | B xiii | gold mine, NEAR ANDREW BAY, | | |
| Nomenclature | 41 | R C | L. OF THE WOODS. | | |
| Northumberland co. | 88, 89 | B xiii | Depth of, 1900 | 35 | ix |
| Oil-fields, thickness and section. 96, 97 | | A xiv | Notes on, 1897. | 39 | vii |
| Ontario co. | 89 | B xiii | 1898. | 63 | viii |
| Peterborough co. | 97 | B xiii | 1899 | 43, 44 | ix |
| Position of, in Silurian | 2 | R C | 1900 | 72 | x |
| Prescott co. | 98 | B xiii | Gold Mining Co. | | |
| Prince Edward co. | 99 | B xiii | Capital and date of charter | 10 | viii |
| Renfrew co. | 101 | B xiii | Officers of | 63 | viii |

| | Page. | Vol. | | Page. | Vol. |
|--|---------------|------|---|------------|------|
| Trill Mfg. and Mfg. Co. | | | Trotter, Thomas | | |
| Incorporation and capital of.... | 7, 276 | vi | Copper mining by, May tp..... | 68 A | xv |
| Operating, 1897..... | 25 | vii | Superintendent, Shakespeare gold mine..... | 66 A | xv |
| See also Inez nickel mine. | | | W. H..... | 20 | x |
| tp., ALG. | | | Boring by, for oil, Caledonia.... | | |
| Copper prospecting in..... | 8 | iii | Trousdale, J. W. | | |
| | 98 | ix | Grant mica mine purchased by.. | 103 A | xv |
| Gold in..... | 225 | i | Lacey mica mine re-opened by.. | 134 | x |
| Nickel in..... | 248 | iv | | 287 | xi |
| | 276 | xii | | 84 A | xiv |
| See also Sultana nickel mine. | | | McClatchey mica mine purchased by..... | 127 | xii |
| Trillabelle nickel mine. | | | Mica mining by, 1903..... | 12 A | xiii |
| Pine in..... | 193 A | xiii | Gould lake..... | 23 A | xvi |
| Road in, built by Gov't..... | 9 | vi | Mica works of, Sydenham..... | 291 | xi |
| Rocks in..... | 196 A | xiii | | 131 | xii |
| conglomerate..... | 131 C | xiv | | 106 A | xv |
| greenstone..... | 75 | i | | | |
| nickel-bearing..... | 23, 63, 64 C | xiv | Trout. | | |
| Swamps in..... | 193 A | xiii | Anzhukumung lake, R.R.d.... | 44 | iv |
| Trillabelle mine, TRILL TP., ALG. | | | Clearwater lake, R.R.d..... | 44 | iv |
| Absence of gossan near..... | 65 C | xiv | L. Superior..... | 13 Bull. | iii |
| Geology of, notes by Coleman.. | 63, 64 C | xiv | streams entering..... | 142 | viii |
| Notes on, 1891..... | 248 | iv | Loch Earne, Th. B.d..... | 126 | v |
| by Coleman..... | 196 A | xiii | Manitou straits, Manitou lake... | 123 | vii |
| <i>Trillium cernuum.</i> | | | Mattagami River dist..... | 117 A | xv |
| Abitibi Lake dist..... | 241 A | xiv | Michipicoten div..... | 206 | vii |
| Mattagami valley..... | 150 A | xv | Sturgeon lake, Th.B.d..... | 40 | x |
| " <i>grandiflorum.</i> | | | brook | | |
| Abitibi Lake dist..... | 241 A | xiv | Lake Superior, streams entering. | 147 | viii |
| <i>Trilobita.</i> | | | | 105 A | xvi |
| Anderdon tp. | 125 | xi | Michipicoten div..... | 297 A | xiv |
| Definition of..... | 544 | R C | Dog river..... | 133 | viii |
| Kwataboahagan river..... | 190 A | xiii | lake (Togue). | | |
| Potsdam formation..... | 40 | R C | Bad Vermilion lake..... | 63 | v |
| St. Joseph island, L. Huron.... | 178 | ii | Montreal river..... | 172 | ii |
| Thorold..... | 117 B | xiii | Windermere lake, Alg..... | 201 | viii |
| Walpole tp..... | 144 | xii | mountain | | |
| Tripe de roche. See Lichen. | | | Hudson Bay slope..... | 178 | vi |
| Triple Link Mfg. and Development Co. | | | salmon | | |
| Capital and date of charter..... | 26 A | xv | James bay and tribs..... | 133 | iv |
| Tripolite (INFUSORIAL EARTH). | | | Lake Superior..... | 147 | viii |
| Formation and use of..... | 236 | vi | Nipigon lake and river. 110, 136, | 139 A | xvi |
| Trist, Robert William | | | Timagami lake..... | 58 | R C |
| Contractor at Copper Cliff mine.. | 173 | iii | speckled | | |
| | 241, 242 | iv | Michipicoten div..... | 206 | vii |
| | 239, 267, 269 | v | Batchawana region..... | 202 | viii |
| Statement by, re ore roasting. | 169, 170 | iii | Dog river..... | 133 | viii |
| Triumph gold mine, PINE PORTAGE BAY, L. OF THE WOODS. | | | Pukaskwa river..... | 137 | viii |
| Depth of, 1898..... | 35 | ix | bay, L. SUPERIOR, ONT. | | |
| Mill at..... | 6 Bull. | i | Photo of..... | 148 | ix |
| photo..... | 112, 113 | vi | Development and Mg. Co. | | |
| Notes on, 1896..... | 96, 97 | vi | Capital and date of charter.... | 24 A | xiii |
| 1897..... | 57 | vii | lake, BOWELL TP., NIP. | | |
| 1898..... | 42, 55 | viii | Beaches on and near..... | 106 C | xiv |
| Gold Mining Co. | | | altitude..... | 103 C | xiv |
| Oil dist., OHIO, U.S. | | | Minor refs. to..... | 192, 200 A | xiii |
| Notes on, by Carll..... | 151, 152 | i | Rocks on..... | 201 A | xiii |
| Trojan gold mine, GRASSY BAY, L. OF THE WOODS. | | | conglomerate, notes. 10, 39, 94, | | |
| Idle, 1900..... | 73 | x | | 129, 130 C | xiv |
| Notes on, 1897..... | 43, 113 | vii | micro-pegmatite..... | 115 C | xiv |
| 1899..... | 51 | ix | nickel-bearing eruptive..... | 211 A | xiii |
| Trombly, Peter | | | | 68-71 C | xiv |
| Copper mining by, Black bay... 109 | | x | sandstone ridges..... | 100 C | xiv |
| | 274 | xi | tuff, analysis..... | 132 C | xiv |
| | | | Shores of, character..... | 6 C | xiv |
| | | | Zinc-blende on..... | 121 C | xiv |
| | | | lake, MICHIGAN, U. S. | | |
| | | | Analysis of limestone from..... | 13 B | xiii |

| | Page. | Vol. |
|--|------------|------|
| Trout lake, MICHIPICOTEN DIV., ALG. | | |
| Glacial deposits near..... | 192 A | xv |
| Minor ref. to..... | 179 A | xv |
| lake, MORGAN TP., ALG. | | |
| Beach on, altitude..... | 103 C | xiv |
| Minor refs to..... | 198, 200 A | xiii |
| Rocks on, nickel eruptive..... | 68 C | xiv |
| lake, NEAR ECHO LAKE, ALG. | | |
| Description of, by Coleman..... | 124 | viii |
| Rocks on..... | 159 | viii |
| lake, NEAR MANITOU LAKE, R.R.D. | | |
| Gold mining on. <i>See</i> King Edward mine. | | |
| lake, S. OF THE HEAD OF BAY LAKE, NIP. | | |
| Cobalt bloom and smaltite on.... | 29 B | xiv |
| Lake Cobalt Mfg. Co. | | |
| Capital and date of charter..... | 30 A | xvi |
| river, KAPUSKASING LAKE, ALG. | | |
| Description of, and of country near..... | 135-138 | ix |
| Forest fires on..... | 142 | ix |
| Waterpower on..... | 142 | ix |
| (MACOZENDA) river, MOOSE RIVER. | | |
| Rapids on, photo..... | 224, 225 | ix |
| Trowbridge, Charles A. | | |
| Part owner, Silver Islet mine. 141, 156 | vi | |
| Photo of..... | 128, 129 | vi |
| C. C. | 172 | ii |
| Troy, HISSARLIK MT., NEAR THE DARDANELLES. | | |
| Cobalt glass in ancient graves at..... | 69 B | xiv |
| Historical notes..... | 166, 167 | i |
| Troy, U. S. | | |
| Blast furnace at, reason for location..... | 127 | ii |
| lake, NIP. | | |
| Description of..... | 110 A | xiii |
| Steel and Iron Co. | | |
| Analyses by, of iron from Snowdon tp..... | 131 | R C |
| Trudeau, ALG. | | |
| Explorations between, and Missinaibi river, paper by Borron. 241-258 | v | |
| Truesdale mica mine, LOUGHBORO TP., FRONTENAC CO. | | |
| Notes on..... | 250 | ii |
| Tubal=Cain. | | |
| Brass casting by..... | 381 | R C |
| Tube mills. | | |
| For cement making..... | 132 A | xiv |
| Tuberculosis. | | |
| Among Indians..... | 178 A | xiii |
| Tubing. | | |
| Canadian imports of, 1881-87, 248, 254 | R C | |
| Tubular=spar. <i>See</i> Wollastonite. | | |
| Tucker=? | | |
| Boring by, for oil, Manitoulin island..... | 73 A | xv |
| Tuckersmith tp., HURON CO. | | |
| Pottery works in. <i>See</i> Egmondville. | | |
| Salt in. <i>See</i> Seaforth. | | |
| Tudhope, J. B. | 91 B | xiii |

| | Page. | Vol. |
|--|------------|------|
| Tudor tp., HASTINGS CO. | | |
| Andradite in..... | 193 | ix |
| Bismuth in..... | 195 | ix |
| Bismuthinite in..... | 234 | viii |
| | 195 | ix |
| Epidote in..... | 198 | ix |
| Gold in..... | 28, 110 | R C |
| | 54 | iii |
| mining. <i>See</i> Craig mine. | | |
| Iron ore in, magnetite, analysis. | | |
| | 201, 202 | ix |
| exhibited in Chicago. 82 | ii | |
| London. 42, 43 | ii | |
| mining. <i>See</i> St. Charles mine. | | |
| Lead in..... | 30 | R C |
| <i>See also</i> Katherine lead mine. | | |
| Mispickel in..... | 205 | ix |
| | 105 | xi |
| Rocks in, limestone, notes..... | 62 B | xiii |
| notes by Miller..... | 198, 199 | xi |
| <i>Tuentalis. <i>See</i> Star flower.</i> | | |
| Tuffs. | | |
| Northern nickel range..... | 205, 206 A | xiii |
| Tug channel, L. OF THE WOODS, R.R.D. | | |
| Notes on, by Coleman..... | 117 | vii |
| Tully limestone (HAMILTON FORMATION). | | |
| Composition of..... | 99 A | xiv |
| tp., NIP. | | |
| Gabbro in, petrographical notes.. | 210 A | xiv |
| Greenstone in..... | 192 A | xiv |
| Soil in, and near..... | 246, 247 A | xiv |
| muskeg..... | 193 A | xiv |
| requires drainage..... | 207 A | xiv |
| Timber in, and near. 192, 222, 223, 235 A | xiv | |
| Tungstate of lime. <i>See</i> Scheelite. | | |
| Tungsten. | | |
| Notes on; price of..... | 217 | vi |
| Use of..... | 233 | vii |
| Tunnel, The, MISSISSAUGI RIVER, ALG. | | |
| Description of..... | 164, 165 | xii |
| Huronian slate, near..... | 171 | xii |
| Photos of..... | 160, 161 | xii |
| island, L. OF THE WOODS, R. R. D. | | |
| | 14 | iii |
| | 171 | v |
| Tupper, Hon. Sir Charles H. | | |
| Director, Cramp Steel Co..... | 23 | xii |
| Report by, on nickel-steel... 174-179 C | xiv | |
| Statement by, <i>re</i> Canadian iron consumption..... | 398 | R C |
| Turbine station, SPANISH RIVER, ALG. | | |
| Waterpower near..... | 10 A | xiv |
| Turcott gold mine, NEAR MANITOPEEPAGEE LAKE, TIMAGAMISTON, NIP. | | |
| Vein of..... | 176 | x |
| <i>Turdus aonalaschka pullasi. <i>See</i> Thrush, hermit</i> | | |
| <i>" fuscescens. <i>See</i> Thrush, Wilson's</i> | | |
| Turgeon, A. | 106 | vii |
| Turgite. | | |
| Madoc and N. Burgess tps..... | 211 | ix |
| Turing, Henry | | |
| Consular report by, on peat in the Netherlands..... | 215-217 | |

| | Page. | Vol. | | Page. | Vol. |
|---|---------------|--------|---|----------|--------|
| Turkey. | | | Turtle river, LITTLE TURTLE LAKE, | | |
| Arsenical ores in..... | 102 | xi | R.R.D. | | |
| Emery in..... | 62 | vi | Agricultural land along..... | 45 | iv |
| Turnberry tp., HURON CO. | | | | 91 | v |
| Brick-yards in. <i>See</i> Bluevale and | | | Iron ore on..... | 309 | xii |
| Glenhannan. | | | pyrites on..... | 175 | A xvi |
| Salt in. <i>See</i> Wingham. | | | Notes on, by Coleman . . . | 126-128 | vii |
| Turnbull, J. S. | | | Route to, from Dryden, descrip- | | |
| Galena mining by, Dorion tp.... | 38 | R C | tion..... | 126 | vii |
| Turner, A. P. | | | (MUSQUATAYSEE) river, TURTLE | | |
| Acknowledgments to..... | 37 | A xiv | LAKE, MONTREAL RIVER, NIP. | | |
| Financial Agent, Canadian Copper | | | Minor ref. to..... | 112 | A xiii |
| Co..... | 123 | x | Porphyry on..... | 119 | A xiii |
| ..... | 64 | xi | stones. | | |
| Photo of..... | 140 | C xiv | Definition of..... | 544 | R C |
| President, Canadian Copper Co. | 117 | xii | Tuscany, ITALY. | | |
| ..... | 54 | A xiii | Mineral lands in, sale of..... | 297 | R C |
| ..... | 1 | C xiv | Tuscarora, ONONDAGA TP., BRANT CO. | | |
| ..... | 63 | A xvi | Mineral water from, analysis.... | 204 | ix |
| Value of Sudbury output given | | | Tutchet, Sir Samuel..... | 209 | v |
| by..... | 156 | C xiv | Tuttle, Thomas..... | 86 | A xiii |
| Turner, Charles A..... | 118 | ii | Tuttle gold mine. <i>See</i> Deloro gold | | |
| Charles E..... | 129 | x | mine. | | |
| Henry G..... | 43 | vi | Tutwork mining. | | |
| Jemima..... | 106 | vii | Explanation of..... | 94 | R C |
| W..... | 106 | vii | Tweed, HUNGERFORD TP., HASTINGS | | |
| William Barrow | | | CO. | | |
| Evidence by, <i>re</i> royalties in Gt. | | | Brick-yard at..... | 70 | B xv |
| Britain..... | 29 | i | analysis of clay used in.... | 17 | B xv |
| Turner island, CLEAR LAKE, RENFREW | | | Marble near..... | 64 | B xiii |
| CO. | | | quarried..... | 236 | R C |
| Apatite vein in..... | 439 | R C | Pyrites mining near..... | 95 | A xiii |
| with hornblende.. | 441 | R C | | 21 | A xvi |
| Pyroxene in..... | 207 | ix | <i>See also</i> Hungerford mine. | | |
| Titanite in..... | 211 | ix | Twentieth Century gold mine, | | |
| Turners falls, CONNECTICUT RIVER, | | | MANITOU LAKE DIST., R.R.D. | | |
| U. S. | | | <i>See also</i> next ref. | | |
| Waterpower of..... | 485 | R C | Mining class at, 1903..... | 4, 52 | A xiii |
| Turnips. | | | Producing, 1902..... | 15 | xii |
| Mentioned as growing at : | | | 1903..... | 4 | A xiii |
| Albany River..... | 111 | iv | Century Gold Mg. Co. | | |
| Fort Mattagami..... | 121 | A xiii | Capital and date of charter..... | 11 | xi |
| Goulais River valley..... | 197 | viii | Gold mining by, Manitou Lake | | |
| Lake of the Woods..... | 105 | vi | dist..... | 248-250 | xi |
| Lost lake, R.R.d..... | 60 | v | | 92 | xii |
| Mississagi..... | 164, 167 | xii | | 67 | A xiii |
| New Post, Abitibi river.... | 186 | viii | | 42, 51 | A xiv |
| Night-hawk lake..... | 123 | A xiii | Plant of, photo..... | 256, 257 | xi |
| Rainy river..... | 163 | v | | 48, 49 | A xiii |
| Turnquist, Victor..... | 54-57 | xi | Twin Cities mine, L. SUPERIOR. | | |
| Turpentine. | | | Witherite in..... | 194 | ii |
| As a by-product of charcoal | | | City Brick and Supply Co. | | |
| burning..... | 481 | R C | Capital and date of charter..... | 26 | A xv |
| Turquoise. | | | islands, EAGLE LAKE, R.R.D. | | |
| Hardness and specific gravity of. | 202 | vi | Gold mining on and near... 95, 96 | | x |
| Notes on, by Goodwin..... | 229 | vi | lakes, NEAR MINNITAKI LAKE, | | |
| Turriff, J. J..... | 62 | A xv | R.R.D. | | |
| Turtle lake, MONTREAL RIVER, NIP. | | | Gold prospecting on..... | 71 | viii |
| Description of..... | 112 | A xiii | lakes, E. OF MOSS TP., TH.B.D., | | |
| Dolerites near..... | 116, 117 | A xiii | | 120, 121 | v |
| lake, N. E. ARM, TIMAGAMI | | | lakes, MICHIPICOTEN DIV. | | |
| LAKE, NIP. | | | Map of, sketch..... | 184 | A xv |
| Jaspilite on..... | 167, 168, 173 | x | Minor ref. to..... | 294 | A xiv |
| lake, R.R.D. | | | lake Mining Co. | | |
| Govt. road to, from Mine Centre. | 34 | vii | Capital and date of charter..... | 30 | A xvi |
| portage, L. OF THE WOODS, | | | Twinlaw Cairns, NEAR GREENLAW, | | |
| R.R.D..... | 115 | vii | SCOTLAND..... | 187 | i |
| | | | Two Harbors, L. SUPERIOR, MINN.. | 125 | R C |

| | Page. | Vol. |
|---|----------|--------|
| Two Lakes Copper Mg. Co. | | |
| Capital and date of charter..... | 30 | A xvi |
| Portages, The, ABITIBI RIVER. | | |
| Character of river near | 181 | viii |
| Rocks at and near. 202, 205, 206, | 210 | A xiv |
| Timber and soil near..... | 204 | A xiv |
| Waterpower at..... | 208 | A xiv |
| Sisters lake, ALG. | | |
| Conglomerate on..... | 177 | A xvi |
| Tycoon Gold Mining Co. | | |
| Capital and date of charter | 10 | viii |
| Work by, L. of the Woods..... | 58 | ix |
| Tyendinaga tp., HASTINGS CO. | | |
| Black River formation in..... | 27 | B xiii |
| Tyler, Edwin | | |
| Cement working by, Queenston. | 108 | i |
| <i>Tympanuchus americanus.</i> See Hen, prairie | | |
| <i>Typha latifolia.</i> | | |
| Abitibi dist..... | 241 | A xiv |
| Ottawa (near)..... | 225 | x |
| Tyres. See Tires. | | |
| Tyrrell, J. B. | | |
| Ref. to surveys by, W. of Hudson bay..... | 90 | v |
| Tzosiak, D. | 167 | iii |
| Uhles pottery, EVANSVILLE, IND. | | |
| Analysis of clay from..... | 160 | A xiii |
| Ulke, Titus | | |
| Analysis by, Sudbury matte | 152 | c xiv |
| Notes by, on iron range, Woman river | 138 | xi |
| Ref. to paper by, on refining nickel ores | 219, 221 | ix |
| <i>Ulmus americana.</i> See Elm, Ameri- can or swamp | | |
| Umber (PAINT). | | |
| Composition of..... | 462 | R C |
| Umptek, KOLAPEN, RUSSIAN LAPLAND. | | |
| Analysis of tinguaita from .. 189, 190 | | ix |
| Uncle Tom. See Thomas, U. H. | | |
| Undal, NORWAY. | | |
| Pyrites deposits at..... | 192 | A xvi |
| Ungava bay, LAB. | | |
| Cod in | 133 | iv |
| Unicorn. See Narwhal. | | |
| <i>Unio.</i> | | |
| Don river..... | 230 | A xiii |
| Union, YARMOUTH TP., ELGIN CO. | | |
| Artesian well in..... | 128 | i |
| apatite mines, W. PORTLAND TP., OTTAWA CO., QUE. | | |
| Pockets in, showing banded structure | 441 | R C |
| Foundry and Machine Co. | | |
| Labour employed by, statistics..... | 369 | R C |
| Output of, 1893 | 120 | ii |
| Iron Co. | | |
| Iron smelting by, notes | 399 | R C |
| Jack Gold Mg. Co. | | |
| Capital and date of charter..... | 13 | vii |
| Mining Co. | | |
| Capital and date of charter..... | 13 | vii |
| Oil Company of Canada. | | |
| Capital and date of charter..... | 9 | xii |
| Petroleum Co. | | |
| Capital and date of charter..... | 5 | xii |

| | Page. | Vol. |
|---|----------|--------|
| United Alkali Co. | 94 | ii |
| | 23 | x |
| Gas and Oil Co. | | |
| Expenses and receipts of, 1901.. | 42 | xi |
| Formation of | 20 | x |
| Gas export of, prohibited..... | 43, 45 | xi |
| supply of, exhausted..... | 22 | A xiii |
| Taxation paid by, 1901..... | 41 | xi |
| 1902..... | 39 | xii |
| Wells of, Essex co | 116 | A xiv |
| Pelée pt..... | 20 | x |
| Kent co..... | 111 | A xiv |
| Romney tp..... | 26 | A xiii |
| Kingdom. See Great Britain. | | |
| Mines of Cobalt. | | |
| Capital and date of charter..... | 31 | A xvi |
| Mining Co. | | |
| Capital and date of charter..... | 9 | x |
| Work by, Lloyd g. m..... | 61 | xii |
| Silver Co. | | |
| Capital and date of charter..... | 31 | A xvi |
| States. | | |
| Aluminium in, production, 1897. | 217 | vii |
| Arsenic imports, 1895-1900 | 112 | xii |
| 1903 | 32 | B xiv |
| mining, absence of | 102 | xi |
| manufacturers in, list of. | 122 | xi |
| Artesian wells in, supply | 52 | i |
| Asbestos in, production, 1882-1892. | 98 | iii |
| Boundary line between, and Canada, position of, in L. St. Clair | 108 | v |
| Bricks in, compared with those of Ont..... | 129, 130 | iii |
| for pavements..... | 108-114 | iii |
| | 16-18 | v |
| clays for, analyses..... | 120 | iii |
| production, 1887 | 229 | R C |
| sand-lime, industry..... | vi | B xiii |
| Business depression in affects mining | 8 | i |
| relations of, with Can- ada..... | 220, 221 | R C |
| exports, 1881-1887..... | xvii | R C |
| imports, 1881-1887..... | 244-254 | R C |
| (Ont.) 1869-1888. | 211 | R C |
| Carborundum, production of, 1897..... | 216 | vii |
| Cement in, consumption, 1901.. | 31 | xi |
| 1902..... | 34 | xii |
| exports to Canada, 1900..... | 15 | x |
| 1901..... | 33 | xi |
| 1902..... | 34 | xii |
| 1903..... | 35 | xii |
| production, 1891..... | 30 | xii |
| 1901..... | 30 | xii |
| standard of | 169 | A xiv |
| Charcoal in, cost of..... | 341 | R C |
| Coal in, royalty on..... | 40, 41 | i |
| Cobalt deposits in..... | 71 | B xiv |
| Copper production of, 1879 | 371 | R C |
| Corundum (and emery) in:— difficulty of obtaining statistics. | 234 | viii |
| occurrences..... | 242, 243 | viii |
| production, 1897-98..... | 216, 249 | vii |
| | 237 | viii |
| 1900..... | 39 | xi |

| | Page. | Vol. | | Page. | Vol. |
|---|------------|------|--|----------|------|
| United States.—<i>Con.</i> | | | United States.—<i>Con.</i> | | |
| Diamonds in, notes by Blue. | 120, 121 | ix | Peat meal used in, amount of... | 189 | vi |
| Ferro-molybdenum, production | | | Population of, 1892..... | 122 | ii |
| of, 1899-1900..... | 46 | xi | Railways in, miles of, 1892..... | 122 | ii |
| Glass-making in, mixtures for. | | | policy when subsidizing..... | 399 | R C |
| | 118, 119 | xi | Royalties on minerals in, notes | | |
| Graphite works in..... | 34, 36 | vi | by Raymond..... | 38-43 | i |
| Gypsum deposits of..... | 119 | R C | Technical education in:— | | |
| Iron (and steel, in:— | | | mining-schools..... | 509-512 | R C |
| average percentage of metallic. | 87 | ii | | 212, 213 | i |
| consumption, annual..... | 83 | ii | notes by Richards.. | 417 | R C |
| per capita, 1888. | 369 | R C | notes by Mather..... | 502, 509 | R C |
| duties on Canadian..... | 18 A | xvi | Cobalt Mining Co. | | |
| furnaces, compared with Swedish. | | | Capital and date of charter..... | 31 A | xvi |
| ish..... | 239 | R C | Glass Co. | 122 | i |
| number..... | 125 | ii | Gold Mfg. Co. | | |
| mining, 1891..... | 237, 238 | i | Capital and date of charter..... | 11 | xi |
| production, 1872-91..... | 120 | ii | Gold mining by, Sturgeon Lake | | |
| 1876..... | 224 | R C | dist..... | 256 | xi |
| 1880..... | 86 | ii | | 85 | xii |
| 1887..... | 468 | R C | Steel Corporation. | | |
| 1888 (Bessemer | | | Huge properties of, L. Superior | | |
| steel)..... | 366 | R C | dist..... | 21 | xii |
| 1888 (general).xviii, 224 | | R C | Interested in International | | |
| 1889..... | 86 | ii | Nickel Co. | 22 | xi |
| 1890-1893..... | 145, 146 | iii | Iron and steel monopoly of..... | 8 A | xiii |
| 1901..... | 322 | xii | University lake, DOG RIVER, L. SUPERIOR | | |
| 1902..... | 21 | xii | ..... | 140 | viii |
| cost..... | 10 | i | Mines, Ltd. | | |
| notes..... | 342-344 | R C | Capital and date of charter..... | 30 A | xvi |
| royalty on..... | 19, 40, 42 | i | silver mine, GIROUX LAKE, | | |
| steel exported to England..... | 34 | x | Nip | | |
| Mica mining in, increased activity, 1900..... | 135 | x | Mining class at..... | 52 A | xvi |
| production and imports, | | | Notes on, and photos..... | 85, 86 A | xv |
| 1881-91..... | 244 | i | Position of..... | 7 A | xv |
| Mineral production, 1887..... | xvii | R C | Producing, 1906..... | 8 A | xvi |
| 1888..... | 525 | R C | Profitable character of..... | 9 A | xv |
| compared with Canada, | | | Unwin—? | | |
| 1887..... | 213 | R C | Steel made by, with manganese. | 363 | R C |
| Mining in, compared to mining | | | Upham, N. J. | 105 | x |
| in Germany..... | 509 | R C | Warren | | |
| laws and regulations. | 278-285 | R C | Quoted <i>re</i> L. Agassiz..... | 202 | v |
| statistics, collection of..... | 414 | R C | | 101 B | xiii |
| Molybdenum. <i>See above</i> , Ferro- | | | Views of, on glaciation in N. Y. | 238 A | xiii |
| molybdenum. | | | Ont. 89,91 | | v |
| Nickel in and to:— | | | Upper Canada Mfg. Co. | | |
| coinage..... | 161 | ii | <i>See also</i> Wallace copper m. | | |
| | 164 | c | Manganite on property of..... | 202 | ix |
| composition..... | 184 | iv | Prospecting by, for copper, Doré | | |
| evidence before Dingley Com- | | | river..... | 206 | vii |
| mission..... | 42-45 | vi | Manitou lake. See Anzhekumming lake. | | |
| statistics, consumption, 1893- | | | Marquette series. See Algonkian. | | |
| 1899..... | 215 | ix | Neepawa gold mine. See | | |
| exports, 1890-94..... | 177 | iv | Neepawa gold mines | | |
| production, 1876-91..... | 131 | ii | Onaping lake. See Onaping | | |
| Nickel-steel, armour-plates..... | 229 | i | lakes. | | |
| | 136-138 | ii | Slate conglomerate series. | | |
| | 148-163 | iii | Notes on, by Coleman..... | 159 | viii |
| | 185 | iv | Upsala prov., SWEDEN. | | |
| | 171-174 | c | Iron ore in. <i>See</i> Dannemora. | | |
| heavy-ordnance..... | 140 | ii | Upton, A. B. | | |
| Ochre imports of, 1903..... | 170 A | xvi | Manager, Stobie mine..... | 268 | xi |
| Oil of, exports to Canada, 1906..... | 24 A | xvi | Option by, on Keenora Reduction | | |
| quality, compared with oil | | | works..... | 98 | xiii |
| of Ont..... | 27 | v | | 88 | ix |
| superior..... | 166 | R C | | | |
| Peat-drying processes in..... | 197 | i | | | |
| | 28 A | xiii | | | |

| | Page. | Vol. | | Page. | Vol. |
|---|---------------|------|--|------------|------|
| Upton, A. B.—<i>Con.</i> | | | Utica formation.—<i>Con.</i> | | |
| Owner, Treasure g. m. | 38 | ix | Grey co. | 48 B | xiii |
| Triumph g. m. | 57 | vii | Lake Huron. | 86, 87 | i |
| Work by, Black Jack g. m. | 43 | ix | Manitoulin island, thickness. | 72, 73 A | xv |
| Uraconite. See <i>Uranochre.</i> | | | Oil fields of Ont., section. | 97 A | xiv |
| Ural mts., RUSSIA. | | | thickness. | 96 A | xiv |
| Corundum in. | 232, 235, 236 | viii | Position of, in Silurian. | 2 | R C |
| Diamonds in. | 122 | ix | Prescott co. | 98 B | xiii |
| Iron ores in. | 473 | R C | Russell and Simcoe cos. | 108, 109 B | xiii |
| origin. | 52 | ii | York co. | 126 B | xiii |
| Platinum in. | 143 | vii | Mimico. | 138 | i |
| Uraninite (PITCHBLEND). | | | Utoe island, SWEDEN. | | |
| A source of radium. | 63 B | xiv | Iron ores of. | 472 | R C |
| Bohemia and Saxony. | 61, 62 B | xiv | | | |
| Notes by Goodwin. | 218 | vi | | | |
| Uranite. | | | V 4, 5 gold locs., NEAR JACK-FISH, TH. B. D. | | |
| Madoc tp., associated with iron. . | 37 | ii | Vaal river, S. AFRICA. | | |
| Uranium. | | | Diamonds in. | 122 | ix |
| Joachimsthal, Bohemia. | 61, 63 B | xiv | <i>Vaccinium capitosum.</i> See <i>Blueberry.</i> | | |
| L. Superior, N. shore, copper-bearing rocks. | 131 | vi | " <i>corymbosum.</i> See <i>Cranberry.</i> | | |
| Notes by Miller. | 232, 233 | vii | " <i>orygeocens.</i> See <i>Cranberry</i> , small-fruited | | |
| Schneeberg, Saxony, production. . | 89 B | xiv | " <i>peninsylvanicum.</i> See <i>Blueberry.</i> | | |
| Uranochalcite, ANNABERG, SAXONY. | 61 B | xiv | " <i>uliginosum.</i> See <i>Duckberry.</i> | | |
| Uranochre OR Uracinite. | | | Vachell, GEORGINA TP., YORK CO. | | |
| Annaberg, Saxony. | 61 B | xiv | Limestone near. | 126 B | xiii |
| Madoc and Snowdon tps. | 194 | ii | Vale of Neath, SOUTH WALES. | | |
| 232, 233 | vii | | Analysis of anthracite from. | 5 Bull. | ii |
| 211 | ix | | Valentine mica mine, McDONGALL TP., P. S. D. | | |
| Ure, Andrew | | | Notes on, 1895. | 280 | v |
| Extract from Dictionary of, on:— | | | Mica Mining Co. | | |
| furnace fuels. | 480 | R C | Nickel mining by, Foley tp. | 93 | vii |
| iron-smelting. | 475 | R C | See also <i>Valentine mica mine.</i> | | |
| peat-drying. | 195 | i | <i>Valisneria spiralis.</i> | | |
| Uren, W. C. | 113 | ix | Ottawa, near. | 225 | x |
| <i>Urinator imber.</i> See <i>Loon.</i> | | | Vallequette, Frank | 203 | R C |
| Urine. | | | Valleyfield, BEAUCHAMPOIS TP., BEAUCHAMPOIS CO., QUE. | | |
| Analysis of, mixed with peat meal. | 192 | vi | Peat bogs near. | 198 | ii |
| Urquhart, J. H. | 106 | vii | Valtellina valley, ITALY. | | |
| Ursa Major gold mine, NEAR JACK-FISH BAY, L. SUPERIOR. | | | Asbestos in. | 96 | iii |
| Depth of, 1899. | 35 | ix | Vanadium. | | |
| Notes on, 1898. | 95 | viii | In titaniferous magnetites. | 211 | ix |
| 1899. | 83, 84 | ix | Vanbruyssels, Ferdinand | 236 | i |
| 1900. | 85, 86 | x | VanBuren, HANCOCK CO., OHIO. | | |
| Photos of. | 112, 113 | ix | Cincinnati anticline near. | 116 | i |
| <i>Urtica gracilis.</i> | | | Van Camps, MOUNTAIN TP., DUNDAS CO. | | |
| Abitibi Lake dist. | 241 A | xiv | Limestone in, Calciferous. | 46 B | xiii |
| Usher, Isaac | | | quarrying. | 40 B | xiii |
| See also <i>Queenston cement works.</i> | | | Vancouver, NEW WESTMINSTER DIST., B. C. | | |
| Cement worked by, 1901. | 32 | xi | First train to, from Montreal. . | 171 | v |
| 1902. | 31 | xii | Sulphuric acid plant at. | 200 A | xvi |
| 1903. | 18 A | xiii | Zinc-blende near. | 210 | vi |
| 1905. | 18 A | xv | island, B. C. | | |
| analysis. | 183 A | xiv | Chalcopyrite in. | 117 | viii |
| plant, notes on. | 163 A | xiv | Van der Meulen, R. C. | 32 | viii |
| Queenston quarry leased by. | 108 | i | Van Evera, J. R. | 118 | ix |
| and Son. See <i>Usher, Isaac</i> | | | 114 | x | |
| Utah, U. S. | | | 75 | xi | |
| Galena deposits of, ref. to. | 460 | R C | lake, MICHIGICOTEN DIV., ALG. | | |
| Mining laws of. | 283 | R C | Cherts near. | 317 A | xiv |
| Utica, ONEIDA CO., N. Y. | | | Iron formation near. | 317 A | xiv |
| Treaty of Ghent signed at. | 108 | v | | | |
| Utica formation named after. | 42 | R C | | | |
| Utica formation (CAMBRO-SILURIAN). | | | | | |
| Character and distribution of. . | 42 | R C | | | |
| Durham co. | 41 B | xiii | | | |

| | Page. | Vol. | | Page. | Vol. |
|--|-------------------|--------|---|----------|-----------|
| Van Hise, Charles R. | | | Van Sommer, J. <i>See</i> Eagle Nest Gold Mfg. Co. | | |
| Notes by, on exhaustibility of iron S. of L. Superior..... | 24 | xi | Vanstone, Richard | | |
| Report by (and others) on Pre-Cambrian nomenclature.... | 269-277 | A xiv | Salt manufacturer. <i>See</i> Gray, Young & Sparling. | | |
| Surveys by, N. of Great Lakes, r. f. to..... | 158-161 | viii | <i>Vannormia tomkinsi</i> . | | |
| S. of Great Lakes, ref. to..... | 154 | vi | St Marys..... | 152 | xii |
| | 151 | ix | Van Winckel, Herbert | 37 | A xv |
| | 196, 197 | x | Varallo, Piedmont, ITALY. | | |
| | 258 | A xiv | Nickel from..... | 116 | C xiv |
| Terminology by, of American iron ranges, ref. to..... | 155 | xi | Varley, J. E. | 103 | x |
| Views of, <i>re</i> :— | | | | 149 | xi |
| break in Huronian..... | 185 | ix | | 84 | xii |
| Conchiching series, ref. to.... | 151 | vii | Patrick..... | 48 | viii |
| iron ore, Helen mine, genesis. | 311 | A xiv | Varnishes. | | |
| N. of L. Superior..... | 143 | xi | Graphite for..... | 14 | ix |
| Penokee range..... | 199 | x | Vars, Harry | 60 | ix |
| Steep-rock Lake series..... | 158 | vii | Varty, Neuty | 260 | vi |
| Laurentian system..... | 194 | v | Vary, G. R. | 68 | A xiii |
| | 159 | vii | | 45 | A xv |
| Van Horne, Sir William C. | 22 | x | Vaseline. | | |
| tp., R. R. D. | | | As a residue of petroleum.... | 155, 163 | R c |
| Gold mining in, 1897..... | 77, 124 | vii | Vasey—? | 274 | xii |
| 1903..... | 66 | A xiii | | 195 | A xiii |
| 1906..... | 59 | A xvi | Vaughan, L. S. | 124 | vii |
| <i>See also</i> Gold Moose g. m. | | | Vaysi, Matti | 33, 35 | A xvi |
| Redeemer g. m. | | | Veal, James | 51 | ix |
| prospecting, 1904..... | 51 | A xiv | Vegetables. | | |
| Van Kleeck, Peter | 92 | vii | Mentioned as growing at:— | | |
| Vankleek Hill, Hawkesbury W. TP., | | | Abitibi lake..... | 50 | A xvi |
| PRE-COIT CO. | | | Dinorwic..... | 182 | vii |
| Limestone quarry near..... | 99 | B xiii | Fort Matachewan..... | 240 | A xiv |
| Sangeen clay worked at..... | 34 | B xv | Fort Mattagami..... | 121 | A xiii |
| Vankoughnet, Hugh | | | Garden River (near)..... | 197 | viii |
| Accident to..... | 32 | ix | Goulais River valley..... | 198 | viii |
| claim, NEAR PARRY SOUND..... | 32, 168 | ix | Insecticide for. formulae of.... | 117 | xi |
| farm, "..... | 178 | ix | Kamiskotaia lake..... | 119, 151 | A xv |
| tp., ALG. | | | Lac des Mille Lacs..... | 114 | v |
| Copper mining in..... | 101 | xii | Lac Seul..... | 62 | v |
| Galena in..... | 60 | R C | Michipicoten..... | 13 | Bull. iii |
| Vanluven's mills, STORRINGTON TP., | | | Mississagi river..... | 164, 167 | xii |
| FRONTENAC CO. | | | Moose Factory..... | 107 | iv |
| Chazy formation at..... | 60 | B xiii | New Post, Abitibi river..... | 186 | viii |
| Van Norman, Benjamin | | | Night-hawk lake..... | 123 | A xiii |
| Early iron-smelting by..... | 320 | R C | Rainy river..... | 163 | v |
| Benjamin | | | Redstone river..... | 107 | A xiii |
| Miner at Belmont g.m..... | 53 | xi | Veins. <i>See</i> Mineral veins. | | |
| D. D..... | 150 | vi | Vendome, Tony | 55, 57 | xi |
| G. R. | | | Venetian enamels. | | |
| Notes by, on his father's iron works..... | 320, 321 | R C | Analysis of..... | 120 | xi |
| Joseph | | | red. | | |
| Iron mining by, Norfolk co. | | | L. of the Woods..... | 64 | R C |
| (1822).... | 320 | R C | Venezuela. | | |
| smelting by, Marmora..... | 321-323, 326, 327 | R C | Dispute between, and British | | |
| | 14, 20, 21 | ii | Guiana..... | 191 | v |
| Norfolk co.... | 113 | i | Nickel coinage in..... | 161 | ii |
| | 13 | ii | | 164 | C xiv |
| | 142 | xi | Vennor, H. G. | | |
| Van Sickle, W. B. | 105 | viii | Boring for apatite advocated by. | 238 | i |
| | 118 | ix | Gold first recognized by, Madoc | | |
| | 144 | x | tp..... | 27 | R C |
| | 75 | xi | Notes by, on Richardson g.m.... | 39 | iv |
| Vansickle, LAKE TP., HASTINGS CO. | | | Ref. to "blotched diorites" of.. | 189 | xi |
| Rocks at and near..... | 191 | xi | surveys by, Frontenac co. | 45 | B xiii |
| | | | | 78 | A xvi |
| | | | Hastings co.... | 38, 39 | iv |
| | | | | 198 | xi |
| | | | | 93 | B xiii |

| | Page. | Vol. |
|--|---------------|------|
| Vennor, H. G.—<i>Con.</i> | | |
| Section by, of Macloe-Marmora dist..... | 106 | R C |
| Thickness given by, of apatite-bearing rocks of Ont..... | 437 | R C |
| Vera Mining Co. | | |
| Capital and date of charter | 37 A | xiii |
| Verandrye, Pierre G. de | | |
| Fort St. Pierre built by | 162, 197 | v |
| Verd-antique marble. | | |
| Description of..... | 544 | R C |
| Verein Chemischer Fabriken, Mann-heim, Germany. | | |
| Sulphuric acid made by | 195 A | xvi |
| Vereinigt Kobaltfeld. | 89 B | xiv |
| Vermicide. | | |
| Arsenic as..... | 114-117 | xi |
| Vermilion. <i>See</i> Mercury. | | |
| Bay Mines Co. | | |
| Capital and date of charter | 38 A | xiii |
| dist., U.S. | | |
| Geological nomenclature of..... | 271, 272 A | xiv |
| iron range. <i>See</i> Minnesota Vermilion range. | | |
| lake, TIMAGAMI REG., NIP. | | |
| Geological notes on, by Miller..... | 169, 170, 173 | x |
| Iron pyrites from, assay | 180 | x |
| Jaspilite on, photo..... | 176, 177 | x |
| lake, VERMILION RIVER, SUD-BURY DIST. | | |
| Farm land on..... | 105 c | xiv |
| Faulting near | 133 c | xiv |
| Galena on | 91 | i |
| Iron pyrites mining on, notes by Fraleek..... | 176, 177 A | xvi |
| Ores of, notes by Stetzner..... | 17 c | xiv |
| Photo of..... | 124, 125 | vii |
| Rocks on and near | 194 A | xiii |
| | 95-97 c | xiv |
| Shores of, character..... | 6 c | xiv |
| Similarity of, to Onwatin lake.... | 5 c | xiv |
| Zinc-blende on | 91 | i |
| lakes, R. R. D. | | |
| Clay near..... | 182 | vii |
| Country south of, character..... | 176 | vii |
| Geology of and vicinity..... | 168, 170 | vii |
| Mineralized veins on | 178 | vii |
| Rocks on and near..... | 180 | vii |
| sandstone..... | 173 | vii |
| (OR McConnell) mine, DENI-son TP., SUDBURY DIST. | | |
| Area of..... | 309 | R C |
| Cassiterite in | 193 | ii |
| | 36 | iv |
| | 211 | ix |
| | 162 c | xiv |
| with sperrylite..... | 190 | ii |
| | 280, 284 | xii |
| Copper in, bornite and chalcocite. 161 c | | xiv |
| evidence before R. C..... | 104, 105 | R C |
| notes by Merritt..... | 88, 89 | R C |
| Evidence before R. C..... | 112, 113, 425 | R C |
| Faulting near | 24 c | xiv |
| Gangue minerals in | 163 c | xiv |
| Gersdorffite in..... | 19 c | xiv |

| | Page. | Vol. |
|--|----------|------|
| Vermilion mine.—<i>Con.</i> | | |
| Gold in..... | 112, 205 | R C |
| | 92 | i |
| | 162 c | xiv |
| notes by Bell | 26 | R C |
| Merritt | 108 | R C |
| Millerite in..... | 159 c | xiv |
| Niccolite in..... | 19 c | xiv |
| Nickel ores in | 90 | i |
| Ores of, connected with Victoria mine..... | 29 c | xiv |
| notes by Stelzner | 278 | xii |
| origin..... | 273, 280 | xii |
| Platinum in..... | 113, 181 | R C |
| | 92 | i |
| | 153 c | xiv |
| sperrylite..... | 178 | ii |
| | 207 | vi |
| | 209 | ix |
| | 283 | xii |
| | 5 A | xiv |
| | 161 c | xiv |
| with tin | 190 | ii |
| | 284 | xii |
| Polydymite in | 207 | ix |
| | 159 c | xiv |
| ferriferous | 168 | ii |
| Rare minerals in..... | 155 c | xiv |
| Re-opened, 1904, notes on | 71 A | xiv |
| Rocks in and near..... | 66, 434 | R C |
| | 272 | xii |
| greenstone..... | 76 | i |
| | 81 c | xiv |
| notes by Coleman..... | 31 c | xiv |
| off-set deposits | 25 c | xiv |
| Surface appearance of, promising. 24 | | R C |
| Tin in. <i>See above</i> , Cassiterite. | | |
| Workings of, notes on old | 142 | vii |
| Mining Co. | | |
| Capital and date of charter | 13 | vii |
| Evidence <i>re</i> , before R.C..... | 113 | R C |
| Merged in International Nickel Co..... | 21 | xi |
| | 140 c | xiv |
| Work by, in Denison tp. 24, 425, 434 | | R C |
| river, SUDBURY DIST. | | |
| Agricultural land in valley of ... | 207 | v |
| Anticlines on | 97 c | xiv |
| Character of | 5 c | xiv |
| Clay flats on | 193 A | xiii |
| | 105 c | xiv |
| Glaciation on | 104 c | xiv |
| Gravel plains on | 219 A | xiii |
| Gold on and near | 108 | R C |
| | 4 | i |
| alluvial..... | 90 | xii |
| map shewing areas..... Facing 256 | | vii |
| paper by Gracey..... | 256-259 | vii |
| report by Coleman..... | 151-159 | x |
| Lumbering on | 119 | iv |
| Mineralized veins on | 178 | vii |
| Muskegs on..... | 202 A | xiii |
| | 32, 37 c | xiv |
| Notes on, by Coleman..... | 207 A | xiii |
| Rocks on and near | 86 | i |
| | 170 | vi |
| | 73 c | xiv |
| Cambrian | 204 | v |
| conglomerate | 94 c | xiv |

| | Page. | Vol. | | Page. | Vol. |
|--|---------------|--------|--|----------|--------|
| Victoria lake, N. OF IGNACE, R.R.D. | | | Victoria (McKINNON) quarry, MADOC | | |
| Pleistocene deposits near..... | 172 | vii | TP., HASTINGS CO. | | |
| Timber near..... | 180 | vii | Evidence <i>re.</i> before R. C..... | 80 | R C |
| Mining Co. | | | Notes on and analysis..... | 61 | B xiii |
| Capital and date of charter..... | 7 | vi | Road, BEXLEY TP., VICTORIA | | |
| | 13 | vii | CO. | | |
| Mining Co. (COBALT). See | | | Cement works near..... | 32 | xii |
| Foster silver mine. | | | | 17 | A xiii |
| (McCONNELL) nickel mine, | | | Peat works near. <i>See</i> Trent Valley | | |
| DENISON TP., SUDBURY DIST. | | | Peat Fuel Co. | | |
| Accidents in, 1900..... | 46 | x | Silver Cobalt Mines. | | |
| 1901..... | 56, 57 | xi | Capital and date of charter..... | 31 | A xvi |
| 1902..... | 43, 44 | xii | tp., ALG. | | |
| 1903..... | 39 | A xiii | Copper in..... | 23 | xi |
| 1905..... | 33 | A xv | Victory gold mine, TRAFALGAR BAY, | | |
| 1906..... | 34, 35 | A xvi | MANITOU LAKE, R.R.D. | | |
| Aerial cable of, photo..... | 144, 145 | x | <i>See also</i> Manitou Mines Co. | | |
| Boring in, with Govt. drill..... | 53, 46 | x | Minor ref. to..... | 122 | vii |
| Closed down..... | 258 | xi | Notes on, 1906..... | 44 | A xvi |
| | 59, 82 | A xiii | Work suspended..... | 59 | A xvi |
| Geology, plans and sections of. | | | gold mine, WITCH BAY, L. OF | | |
| | 268-273 | xii | THE WOODS..... | 59 | xi |
| | 25-28 | C xiv | Vienna, BAYHAM TP., ELGIN CO. | | |
| Gold in..... | 31, 162 | C xiv | Corniferous limestone in..... | 41 | B xiii |
| Matte from, analysis..... | 152 | C xiv | Vignuda, GUISeppe. | | |
| Mining class at..... | 58 | xii | | 35 | A xiv |
| Minor ref. to..... | 17 | xii | Vignaes pyrites mine, NEAR STAV- | | |
| Not included in International | | | ENGER, NORWAY. | | |
| Nickel Co..... | 22 | xi | Rocks of..... | 192 | A xvi |
| Notes on, 1897..... | 141 | vii | Viking gold mine, EAGLE LAKE, | | |
| 1901..... | 283, 284 | xi | MANITOU LAKE DIST., R.R.D. | | |
| 1902..... | 123, 125, 287 | xii | Minor ref. to..... | 49 | xii |
| 1903..... | 86 | A xiii | Notes on, 1900..... | 96 | x |
| 1904..... | 71, 72 | A xiv | 1902..... | 93 | xii |
| 1905..... | 65, 66 | A xv | 1903..... | 65, 66 | A xiii |
| 1906..... | 66, 67 | A xvi | Work on, 1901, intermittent.... | 244 | xi |
| Plan of, <i>See above</i> Geology, plans | | | Viking Mining Co. | | |
| and sections. | | | | 65 | A xiii |
| Plant of, leased to Canadian Cop- | | | Villanova, TOWNSEND TP., NORFOLK | | |
| per Co..... | 69 | A xiv | CO. | | |
| modern..... | 142 | C xiv | Fossil corals from..... | 142, 143 | xii |
| smelter, photos..... | 96, 97 | x | Limestone quarry at..... | 88 | B xiii |
| | 96, 97 | xii | Ville Marie. See Baie des Pères. | | |
| | 24 | C xiv | "Ville Marie" s.s. | | |
| re-opened..... | 68 | A xiv | | 248 | A xiv |
| Platinum in. <i>See below</i> , Sperry- | | | Villeneuve, P. C. J. B. de Silvestre. | | |
| lite. | | | | 165 | i |
| Production of..... | 156 | C xiv | mica mine, VILLENEUVE TP., | | |
| 1904..... | 10 | A xiv | OTTAWA CO., QUE. | | |
| 1905..... | 12 | A xv | Selwyn's views on..... | 68 | R C |
| Rare minerals in..... | 155 | C xiv | Uraninite in..... | 218 | vi |
| Rocks in and near..... | 24-27 | C xiv | tp., OTTAWA CO., QUE. | | |
| gabbro..... | 295 | xii | <i>See also</i> last ref. | | |
| gossan..... | 31 | C xiv | Mica of, quality..... | 150 | R C |
| granite..... | 83 | C xiv | Vincent, John | | |
| greenstone..... | 81 | C xiv | | 40 | iv |
| greywacké..... | 88 | C xiv | William | | |
| norite..... | 112 | C xiv | | 39, 79 | A xv |
| offset deposits..... | 13, 114, 163 | C xiv | Vinemount, HAMILTON. | | |
| slate..... | 93 | C xiv | Limestone from, quality..... | 126 | B xiii |
| syenite..... | 133 | R C | Viola blanda. | | |
| Sperrylite in..... | 280, 283 | xii | Abitibi Lake dist..... | 241 | A xiv |
| | 5 | A xiv | Mattagami valley..... | 150 | A xv |
| | 31, 171, 162 | C xiv | " <i>canina</i> . | | |
| Work at, 1900..... | 124, 125 | x | Mattagami valley..... | 150 | A xv |
| 1901..... | 21, 65 | xi | " <i>canina</i> var. <i>muhlenbergeri</i> . | | |
| 1905..... | 47 | A xv | Mattagami valley..... | 150 | A xv |
| Worked by Mond..... | 142 | C xiv | " <i>pubula</i> var. <i>cucullata</i> . | | |
| | | | Mattagami valley..... | 150 | A xv |
| | | | " <i>rotundifolia</i> . | | |
| | | | Abitibi Lake dist..... | 241 | A xiv |
| | | | Violet gold mine, L. OF THE WOODS, | | |
| | | | R. R. D. | 96 | xii |

| | Page. | Vol. |
|---|----------|--------|
| Violet Mining Co. | | |
| Capital and date of charter..... | 30 | A xvi |
| <i>See also</i> Handy silver mine. | | |
| nickel mine. <i>See</i> Lady Violet mine. | | |
| silver mine, COLEMAN TP., NIP. | | |
| Notes on, 1905..... | 80 | A xv |
| Shipping, 1905..... | 15 | B xiv |
| 1906..... | 8 | A xvi |
| Violette, Charles | | |
| Analysis by, of wood charcoal... 166 | vi | |
| <i>Virro olivaceus</i> (RED-EYED). | | |
| Abitibi dist..... | 243 | A xiv |
| " <i>solitarius</i> (BLUE HEADED). | | |
| Abitibi dist..... | 243 | A xiv |
| Virgin falls, NIPIGON RIVER, TH. B. D. | | |
| Rocks near..... | 133 | A xvi |
| islands, L. NIPIGON, TH. B. D. | 107 | A xvi |
| Virginia, GEORGINA TP., YORK CO. | | |
| Arsenic plant in..... | 31 | B xiv |
| Virginia, U. S. | | |
| Iron pyrites in, notes by Fra-leck..... | 192 | A xvi |
| Limestone in..... | 126 | B xiii |
| Natural gas in..... | 115 | i |
| gold mine, STURGEON LAKE, L. OF THE WOODS. <i>See</i> Lizzie mine. | | |
| Mining Co. | | |
| Gold mining by. <i>See</i> Lizzie mine. | | |
| Mica mining by, near Edgington. | 98 | vii |
| Vitreous copper. <i>See</i> Chalcocite. | | |
| silver. <i>See</i> Argentite. | | |
| Vitrified brick. <i>See</i> Brick, vitrified | | |
| Vitriol. <i>See</i> Sulphuric acid. | | |
| Vivian, Sir Hussey Herbert | | |
| <i>See also</i> Vivian H. H. & Co. | | |
| Notes by, on Rio Tinto and Tharsis copper mines..... | 372, 373 | R C |
| On smelting ores..... | 374, 375 | R C |
| Sampson | | |
| Bruce mines worked by, 1853.... | 96 | R C |
| H. H. & Co. | | |
| Accident at mine of, 1893.... | 167, 176 | iii |
| Alkaline sulphide process employed by..... | 220 | ix |
| Boring by, with Govt. drill.... | 53, 56 | x |
| Cobalt ores smelted by..... | 103 | A xiii |
| Losses of, 1893-4..... | 179 | iv |
| Murray mine worked by..... | 434 | R C |
| 1891..... | 231 | i |
| 1892..... | 246 | ii |
| 1893..... | 186, 187 | iii |
| 1894..... | 122 | iv |
| notes..... | 141 | C xiv |
| <i>See also</i> Murray mine. | | |
| Nickel alloy of, analysis..... | 184 | iv |
| Not included in International Nickel Co. | 22 | xi |
| Plant of, at Swansea, Wales, ref. to..... | 67 | R C |
| 236 | i | |
| Smelter of, Sudbury, capacity... 435 | R C | |
| Work by, at Sudbury, 1899..... | xxiii | R C |
| Vivison, R. E. | 105 | A xv |
| Vladimir prov., RUSSIA. | | |
| Peat in..... | 217, 218 | ii |

| | Page. | Vol. |
|---|------------|--------|
| Voerman, —? | | |
| On charcoal fuel for iron smelting..... | 480 | R C |
| Vogt, Prof. J. H. L. | | |
| Comparison by, of Canadian and Norwegian nickel ores..... | 283 | xii |
| Notes by, on Norway nickel ore. | 154 | C xiv |
| Sudbury gabbro.... | 118 | C xiv |
| Quoted re nickel production..... | 182 | iv |
| Theory of, for Norwegian nickel ores..... | 278 | xii |
| applied to Sudbury. | 17 | C xiv |
| Views of, re Sudbury deposits.... | 236 | xii |
| Work by, on Scandinavian nickel deposits, ref. to..... | 52 | iv |
| | 3 | C xiv |
| Volcanic action. | | |
| As a cause of mineral veins..... | 252 | v |
| Oil and Gas Co. | | |
| Operating, 1906..... | 97 | A xvi |
| Reef Co. | | |
| Capital and date of charter..... | 5 | xii |
| Reef gold mine, MUD LAKE, MANITOW LAKE DIST., R. R. D. | | |
| Minor ref. to..... | 4 | A xiv |
| Notes on and photo..... | 42, 52, 53 | A xiv |
| tuff. | | |
| Porcupine lake, Alg..... | 120 | A xiii |
| Volkes, D. | | |
| Brick-yard of, Comber..... | 63 | B xv |
| Volney, Dr. C. W. | | |
| Inventor of Volney blasting powders..... | 152 | A xvi |
| Paper by, on occurrences and analyses of lithographic stone. | 180-184 | ii |
| ref. to..... | 137 | iii |
| Von Cotta, H. | | |
| Notes by, on Joachimsthal dist., Bohemia..... | 62 | B xiv |
| Feilitzen, H. | | |
| Experiments by, on moss-litter.. | 140 | iii |
| Hagen Co. <i>See</i> Hugo Von Hagen Exploration Co. | | |
| Leepin, Prof. | | |
| Molybdenum suggested by, for hardening steel..... | 46 | xi |
| Voss Mining Co. | | |
| Capital and date of charter..... | 10 | viii |
| " Voyageur " s.s..... | 30 | x |
| Vulcan Forge and Iron Works. | | |
| Labour employed by, statistics.. | 370 | R C |
| iron mine, N. OF BATCHAWANA BAY, ALG. | | |
| Notes on, by Coleman..... | 162 | ix |
| | 190 | x |
| Rocks of..... | 205 | x |
| Reduction and Refining Co. | | |
| Capital and date of charter..... | 9 | xii |
| W211, 218, 219 iron locs., MATAWIN RANGE, R. R. D.... | 82, 132 | v |
| 221 iron loc., MATAWIN RANGE, R. R. D. | | |
| Borings in, record..... | 82, 131 | v |
| 222 iron loc., MATAWIN RANGE, R. R. D. | | |
| Notes on..... | 82, 130 | v |

| | Page. | Vol. | | Page. | Vol. |
|--|--------------|----------|---|-----------------------|------|
| WA 3, 4 gold locs. <i>See</i> Trojan mine. | | | Wabigoon river, WABIGOON LAKE, R. R. D. | | |
| 7-9 gold locs. <i>See</i> Sentinel mine. | | | Agricultural land along..... | 207 | v |
| Waal river, HOLLAND. | | | Dam on, built by Govt. 34, 121, 125 | vii | |
| Brick kilns along, peat used in.. | 216 | ii | Soil in valley of..... | 182 | vii |
| Wabash valley, INDIANA. | | | Surveyed by Coleman, 1895..... | 3 | v |
| Gas of, salt water with..... | 154 | i | Waterpower on..... | 118 | iv |
| Wabasistagenda (WAPESENCEA-KENDA) lake, E. OF MATTAGAMI RIVER, ALG. | | | | 252 | vii |
| Description of..... | 182 | x | | 14 A | xv |
| Wabatongusheen lake, MICHIPICOTEN DIV. | | | Tank, WABIGOON LAKE, R. R. D. | | |
| Headwaters of Michipicoten river..... | 187 | vii | Mission station at..... | 54 | v |
| Length of..... | 7 Bull. | iii | Moraine north of..... | 90 | v |
| Minor ref. to..... | 176 A | xv | Vegetables and oats at..... | 62 | v |
| Notes on, by Willmott..... | 197, 198 | vii | Wabinoash bay, L. NIPIGON, TH. R. D. | | |
| Photo of portage near..... | 140, 141 | vii | Limestone at..... | 111 B | xiii |
| Rocks on..... | 250 | v | Wabiskagami lake, WABISKAGAMI RIVER, MISSINAIBI RIVER. | | |
| Surveyed, 1895..... | 243 | v | Clay on, kaolinic..... | xii A | xiii |
| Swamp near, height of..... | 9 Bull. | iii | Minor ref. to..... | 136 A | xiii |
| | 205 | vii | Rocks on..... | 142 A | xiii |
| Wabegashic rapid, GROUND-HOG RIVER, ALG. | | | | 156 A | xiii |
| | 133 | ix | | | |
| Wabi bay, L. TIMISKAMING, NIP. | | | river, MISSINAIBI RIVER, ALG. | | |
| Minor ref. to..... | 36 B | xiv | Description of, by J. M. Bell, 136, | 137 A | xiii |
| Rocks on and near..... | 85-87 B | xiii | Erosion by, in two cycles..... | 147 A | xiii |
| Cobalt Silver Mg. Co. | | | Forest fires on..... | 177 A | xiii |
| Capital and date of charter..... | 30 A | xvi | Rocks on..... | 138 A | xiii |
| creek, WABI BAY, L. TIMISKAMING. | | | | 139 A | xiii |
| | 35 B | xiv | | 143 A | xiii |
| pt., L. TIMISKAMING. See Dawson pt. | | | gneiss, petrography | | |
| Wabigoon, ZEALAND TP., R. R. D. | | | lignitic shales | | |
| Gold mining near..... | 124 | vii | Waboose island, DOG LAKE. See Rabbit island. | | |
| Granite near, intrusive..... | 279 | viii | river, MISSINAIBI RIVER, ALG. | 191 | viii |
| Minor ref. to..... | 121 | vii | Wad. See Bog manganese. | | |
| Road from, to Mine Centre..... | 49 | viii | cobaltiferous See Asbolite. | | |
| | 70 | viii | Waddell, Dr. J. | | |
| Route from, to "..... | 171, 172 | vii | Analyses by, of Cobalt ores..... | 99 A | xiii |
| Slate near..... | 86 | iv | | 21 B | xiv |
| Free Milling Gold Mg. Co. | | | lake, NORMAN TP., NIP. | | |
| Capital and date of charter..... | 13 | vii | Copper on..... | 431 | R C |
| gold mine, WABIGOON LAKE, R. R. D. | | | Minor ref. to..... | 74 C | xiv |
| Copper pyrites in..... | 37 | iv | Nickel on..... | 434 | R C |
| Notes on, by Coleman..... | 67 | iv | | 281 | xi |
| lake, R. R. D. | | | Shape of, conforms to strike of rocks..... | 102 A | xiii |
| Agricultural land near..... | 118 | iv | | 73 C | xiv |
| | 92 | v | Waddie, H. J. | 99 | xi |
| Ducks on..... | 97 | iv | Wadsworth, Dr. E. M. | | |
| Glaciation on..... | 101 B | xiii | Views of, re origin of Mesabi ore deposits..... | 198 | x |
| Gold mining near. <i>See</i> Manitou Lake dist. | | | Waffle, William. | 52 | xi |
| Huronian near..... | 171 | vii | Wager, Leonard | | |
| Iron ore E. of..... | 20, 22 | R C | Iron ore shewn by, at World's Fair..... | 82 | ii |
| | 136 | xi | Notes by, on iron at Wadsworth..... | 133 | R C |
| Map of district of..... | With Vol. | iv | Wages. | | |
| Notes on, by Coleman..... | 67 | iv | Details of, paid in the mining industry:— | | |
| Quartz from, assay..... | 180 | vii | 1894..... | 13-15, 20, 25, | iv |
| | test on..... | 230, 231 | 1895..... | 12, 18-20, 28, | v |
| Rice (wild) near..... | 96 | iv | 1896..... | 16, 24, 22, 40, | vi |
| Route from, to Lac Seul..... | 53-55 | v | 1897..... | 16, 19, 24-26, | vii |
| Surveyed by Coleman, 1895..... | 3 | v | 1898..... | 13, 17-23 | viii |
| | | | 1899..... | 18, | ix |
| | | | 1900..... | 31, 36, 37, | x |
| | | | 1901..... | 14, 19, 20, 26, | xi |
| | | | 1902..... | 14, 17-19, 22, 37-40 | xii |
| | | | 1903..... | 5-7, 10, 19-24 A | xiii |
| | | | 1904..... | 4, 5, 11, 14, 18-20 A | xiv |

| | Page. | Vol. | | Page. | Vol. |
|---|-------|------|---|-------|------|
| Wages.—<i>Con.</i> | | | Wakefield mica mine, N. BURGESS | | |
| Details of, paid in the mining industry.— <i>Con.</i> | | | TP., LANARK CO. | | |
| 1905..... 4, 8, 13, 16, 19-22 A | xv | | Notes on..... 245 | i | |
| 1906..... 7, 11, 15-17, 21-25 A | xvi | | tp., OTTAWA CO., QUE. | | |
| Iron mining, 1890..... 135 | R C | | Apatite deposits in..... 178, | 436 | R C |
| Wagner, D. | | | Wakwayowkastik river, FRENCH | | |
| Analyses by, of fossil fuels..... 184 | j | | RIVER, MOOSE RIVER. | | |
| Frederick..... 55 | viii | | Ascended by Parks, 1898..... 192 | viii | |
| George..... 263 | xi | | Gypsum at mouth of..... 158 A | xiii | |
| | 71 A | xv | Walbank, Samuel Sedden 174 | ii | |
| Wagstaff, A. H. | | | Walcott, C. D. 209 A | xiv | |
| Brick works of, notes and photo. 109 B | xv | | Wales. | | |
| analysis of clay used in..... 8 B | xv | | Cambrian in, and called after... 31 | R C | |
| Wahbakhimmung lake. <i>See</i> White- | | | Coal in, royalty on..... 36 | i | |
| earth lake. | | | Copper smelting in, notes on... 374 | R C | |
| Wahnapiitae Gold Fields Co. | | | Gold in, with zinc-blende..... 45 | i | |
| Capital and date of charter..... 10 | viii | | Iron industry of, foreign ores | | |
| Mining Co. | | | used in..... 121 | ii | |
| Capital and date of charter..... 13 | vii | | Nickel refinery in. <i>See</i> Swansea. | | |
| Navigation Co. 87 | vii | | Peat bog in, worked for copper . 206 | ii | |
| Power Co. | | | farm, LEAMINGTON, ESSEX CO. 116 A | xiv | |
| Power from, for Sudbury dist... 29 A | xvi | | Walker, Byron E. | | |
| Work by, 1905 : photo of plant. 62, | 63 A | xv | Acknowledgments to..... 183, | 191 A | xiii |
| 1906..... 67 A | xvi | | Determination by, of fossils | | |
| Wahnapiitei. <i>See</i> Wanapiitei. | | | from :— | | |
| Waide Bros. | | | Lac Seul..... 92 | v | |
| Brick-yard of, London, Ont..... 29 | xii | | Lake Superior, N. shore .. 156 | viii | |
| | 81 B | xv | Port Colborne..... 35 | xi | |
| Wainfleet Natural Gas Co. | | | Evidence by, before R. C. re :— | | |
| Capital and date of charter..... 31 A | xvi | | Geological Surveys... 4I1 | 480 R | c |
| tp., WELLAND CO. | | | phosphates..... 180 R | c | |
| Limestone in..... 35 | xi | | Hiram | | |
| thickness..... 27, | 28 A | xv | Artesian wells of, Walkerville... 59 | i | |
| Natural gas in..... 131, | 132 | i | Boring by, for gas, Marshfield .. 120 | i | |
| | 108 A | xv | President, Natural Gas and Oil | | |
| boring for..... 105, | 106 A | xiv | Co..... 28 | v | |
| <i>See also</i> Winger. | | | Salt well of, Oxford tp., notes on. 33 | vi | |
| Peat in..... 191 | i | | J. E. | | |
| | 33 | iv | Sulphur mining by, near Schreiber..... 89 | x | |
| <i>See also</i> Welland peat bog. | | | J. W. 118 | ix | |
| Wainwright tp. | | | R. | | |
| Agricultural land in..... 182 | vii | | Gold mining by, near Jackfish.. 266 | vi | |
| Wait, F. G. | | | Mackenzie sta. 39 | x | |
| Analysis by, of :— | | | Robert E. | | |
| anthraxolite, Lab..... 162 | vi | | Gas well of, Caledonia..... 252 | iv | |
| limestone, Chalk lake..... 90 B | xiii | | 283, | 284 | v |
| Colborne tp..... 67 B | xiii | | Notes by, on same..... 281 | vi | |
| Lavant tp..... 71 B | xiii | | Dr. T. L. | | |
| Ottawa Front..... 38 B | xiii | | Acknowledgments to..... 229 | viii | |
| Renfrew co... 106, | 107 B | xiii | Analyses by, of Sudbury matte.. 283 | xii | |
| marl, Artemesia tp..... 51 B | xiii | | ores..... 117, | 158 c | xiv |
| Eramosa tp..... 122 B | xiii | | rock 239 | xii | |
| Mackay lake..... 39 B | xiii | | 86, 116, 117, | 120 c | xiv |
| Shetfield tp..... 28 B | xiii | | Notes by, on rocks of Blezard | | |
| White lake, Hastings co. 66 B | xiii | | mine..... 56 c | xiv | |
| Waite, Thomas 85 | R C | | References to paper by, Sudbury | | |
| Wakefield, Edward | | | nickel deposits..... 236, 239, | 240. | xii |
| Brick-making by, Carlton West. 107 B | xv | | References to surveys by, Sud- | | |
| Wakefield, YORKSHIRE, ENGLAND. | | | bury dist... 241, 251, 254, 293, | 296 | xii |
| Portland cement made at..... 118 A | xiv | | 204, 205, | 208 A | xiii |
| Brick Co. | | | views of, Sudbury | | |
| Brick making by, Carlton West. 29 | xii | | eruptives.. 276, | 277 | xii |
| | 107 B | xv | T. R. 241 | ii | |
| Mica Co. | | | Thomas George | | |
| Capital and date of charter..... 37 A | xiii | | Peat drying process of, notes.... 198 | i | |
| | | | W. 49 A | xiii | |

| | Page. | Vol. | | Page. | Vol. |
|--|--------------|--------|--|----------|-----------|
| Walker and Brown. | | | Wallace copper mine.—<i>Con.</i> | | |
| Gold prospecting by, near Jack- | | | Notes on | 123 | R C |
| fish | 81 | vii | ..... | 63 | ii |
| Pioneers, The New Klondike .. | 78 | vii | Rocks in, strike of | 91 | R C |
| 72, 73 | viii | | Rutile in | 208 | ix |
| & Co. | 191 | R C | <i>See also</i> Upper Canada Mg. Co. | | |
| & Logan. | | | tp., PERTH CO. | | |
| Brick-yard of, London, Ont. | 81 | B XV | Fossils in, on surface | 91, 95 | B xiii |
| Bros. | | | Wallaceberg, KENT CO. | | |
| Quarrying by, Stamford tp. | 96 | i | Coal near, boring for | 44, 45 | A xiii |
| Thorold | 28 | xii | Wallbridge, Campbell <i>See</i> Wall- | | |
| =Carter Process. | | | bridge iron mine. | | |
| Test of, Marmora | 56-60 | iii | H. H. | | |
| feldspar mine, PORTLAND TP., | | | Evidence by, before R. C. <i>re</i> :— | | |
| FRONTENAC CO. | | | Canada's mining market | 234 | R C |
| Notes on, 1902 | 138 | xii | iron, Madoc tp. | 133 | R C |
| Gas and Oil Co. | | | smelting, Sweden | 393 | R C |
| Oil prospecting by, Bothwell | | | Mrs. Jane A. | | |
| field | 21 | vi | Iron ore shown by, at World's | | |
| ..... | 109 | A xiv | Fair | 80, 82 | ii |
| Oil producing | 24 | vi | Owner, Miller iron mine, Madoc | | |
| Work by, 1907 | 13 | vii | tp. | 32 | viii |
| Island, L. HURON. | | | W. H. | | |
| Trap rock quarrying on | 13 | v | iron mine, MADOC TP., HAST- | | |
| river, L. HURON | 13 | v | INGS CO. | | |
| Walkerton, BRANT TP., BRUCE CO. | | | Chalcodite in | 196 | ix |
| Brick-yards in, notes | 60 | B XV | Evidence <i>re</i> , before R. C. | 132 | R C |
| clay for, Erie | 13 | B XV | Notes on | 127 | R C ; 129 |
| Saugeen | 19, | 20 | Ore from, as a flux | 91 | A XV |
| Lithographic stone near | 45 | R C | Working of, pre-historic | 183 | R C |
| 636 | B xiii | | Walli, Jane | 33, 35 | A xvi |
| Method of draining clay bank at. | 25 | B XV | Wallingford, E. <i>See</i> next ref. | | |
| Walkerville, BUTTE CO., MO. | | | Bros. & Co. | | |
| Quartz-monzonite from | 118 | A xiii | Mica trimming works of, Ottawa. | 131 | xii |
| Walkerville, E. SANDWICH TP., ESSEX | | | Gold Mg. Co. | | |
| co. | | | Capital and date of charter | 10 | viii |
| Natural gas consumption of | 42 | xi | Mining and Mica Co. | 106 | A XV |
| ..... | 28 | v | 91 | A xvi | |
| used in, details | 19 | x | Wallis, Herbert | | |
| Walklate, William | 205 | i | Notes by, on fuel for locomo- | | |
| Wall, A. | 75 | xi | tives | 205, 206 | i |
| Wallace, John | 105 | viii | Walpole Ore Co. | | |
| 112, 118 | ix | | Capital and date of charter | 13 | vii |
| 144 | x | | tp., HALDIMAND CO. | | |
| W. R. | | | Artesian wells in | 62 | i |
| Course of Ophir veins proved by. | 43 | iii | Fossil corals in | 142-144 | xii |
| William | 135 | x | Gas in | 108 | A XV |
| 288 | xi | | Limestone quarries in | 54 | B xiii |
| & Son. | | | Oriskany formation in | 153 | xii |
| Brick-yard of, North Bay | 83 | B XV | Walrus. | | |
| analysis of clay used in | 27 | B XV | Hudson bay and strait | 133 | iv |
| J. & Sons. | 20 | vii | Walsh, J. J. | | |
| copper mine, MOUTH OF WHITE- | | | Owner, Sabawe gold mine | 107 | x |
| FISH RIVER, L. HURON. | | | 150 | xi | |
| Chalcopyrite in | 196 | ix | 72 | A xiii | |
| Cobalt in | 90 | i | T. | | |
| Evidence <i>re</i> , before R. C. | 67, 97, 142, | 143 | Gold prospecting by, L. of the | | |
| Examined by Murray, 1848 | 221 | i | Woods | 102 | vii |
| Gold in | 59 | R C | Part owner, Trojan gold mine .. | 43 | vii |
| Iron in | 142, 143 | R C | gold mine. <i>See</i> Sabawe gold | | |
| at World's Fair | 81 | ii | mine. | | |
| Manganite in | 202 | ix | Walsingham tp., NORFOLK CO. | | |
| Morenosite in | 194 | ii | Corniferous formation in. <i>See</i> | | |
| 205 | ix | | Port Rowan. | | |
| Nickel in | 24, 67 | R C | Iron ochre in | 200 | ix |
| 170, 233 | i | | Walton, John | 199 | iii |
| 58 | B xiv | | Wampum Gold Mining Co. | | |
| | | | Work by, 1896 | 54 | vi |

| | Page. | Vol. | | Page. | Vol. |
|--|------------------|------|---|---------------|------|
| Wanatangua lake. <i>See</i> Frederick House lake. | | | Wanapitei river, WANAPITEI LAKE, NIP. | | |
| Wanapitei, DRYDEN TP., NIP. | | | Forest fires on, 1872..... | 206 | v |
| Cyanite at..... | 237 | vii | Gold on, alluvial..... | 258 | vii |
| | 200 | ix | notes by Gibson..... | 17 | xi |
| Description of..... | 138 | vii | Lumbering on..... | 119 | iv |
| Gneiss at, photo of structure..... | 124, 125 | vii | Notes, by Coleman, on upper portion of..... | 154, 155 | x |
| Kettle-holes near..... | 167 | vi | Rocks on..... | 172 | vi |
| Labradorite at..... | 200 | ix | Huronian..... | 127 c | xiv |
| gold mine, WANAPITEI LAKE, NIP. | | | limestone, dolomite ... | 82 | i |
| Quartz from, mill test on..... | 214 | v | for burning..... | 94 | i |
| lake, NIP. | | | unconformity of..... | 69 | i |
| Arsenolite near..... | 195 | ix | Sand deposits on, notes and section..... | 182, 183 | vi |
| Cassiterite near..... | 211 | ix | Waterpower on..... | 138, 252, 253 | vii |
| Copper on..... | 24, 434 | R C | | 10 A | xiv |
| Glaciation near..... | 102 c | xiv | | 13 A | xv |
| Gold on and near..... | 27 | R C | notes..... | 67, 68 A | xiv |
| | 92 | i | photo..... | 62 A | xv |
| | 191 | ii | | 63 A | xv |
| | 13 | iii | Wandigo lake. <i>See</i> Windigoostigwan lake. | | |
| | 123 | iv | Wangan OR Wannigans. | | |
| 8 | v | | Description of..... | 164 | v |
| mining..... | 4 | iv | Wanlothead, SCOTLAND. | | |
| notes..... | 112, 435, 436 | R C | Gold mining near..... | 115 | R C |
| | 267, 268 | vi | Wanzatika lake, OPASATIKA RIVER, ALG. | | |
| 85-87, 136-141 | vii | | | 145 A | xiii |
| nuggets..... | 38 | iv | Wapiti. See Elk. | | |
| Iron ore on and near..... | 141 | vii | War. | | |
| | 201 | x | Effect of, on mining..... | 101 | viii |
| | 224 A | xiii | Eagle Consolidated Mg. and Dev. Co. | | |
| mining..... | 177, 178 | x | Capital and date of charter..... | 9 | xii |
| | 20, 21, 298, 299 | xii | Warbler. | | |
| notes by Coleman..... | 185, 186 | x | Abitibi dist..... | 253 A | xiv |
| with jasper..... | 183 | ix | Yellow | | |
| <i>See also</i> Moose Mountain iron range. | | | Abitibi dist..... | 126 A | xiii |
| Bonanza mine, Scadding tp. | | | Ward, A. | 118 | ix |
| H. B. C. post on, photo..... | 176, 177 | vi | E. B. | 141 | vi |
| Jaspilite on and near, notes by Miller..... | 177 | x | Edwin | 129 | vii |
| Minor ref. to..... | 201 | v | Dr. Leslie D. | 22 | xi |
| Nickel on and west of..... | 145 c | xiv | L. M. | 106 | vii |
| | 273 | xii | | 101, 105 | viii |
| discovery..... | 434 | R C | | 118 | ix |
| <i>See also</i> Northern nickel range. | | | | 144 | x |
| Pine north of..... | 119 | iv | Myrtle | 105 | viii |
| Rocks on and near..... | 72, 73, 82 | i | | 118 | ix |
| | 206 | x | | 114 | x |
| | 83 B | xiii | Venia A. | 118 | ix |
| arkose..... | 92 c | xiv | | 144 | x |
| conglomerate..... | 204 | x | | 75 | xi |
| | 134 A | xvi | W. | 105 | viii |
| gossan..... | 73 c | xiv | | 118 | x |
| granites..... | 68, 69, 84 | i | | 144 | x |
| | 158 | vii | | 75 | xi |
| Huronian..... | 71 | i | | 67 | xii |
| | 39 | iv | | 48 A | xiii |
| | 158 | vii | W. E. | | |
| | 160 | viii | Steel and concrete first used by, for building..... | 175 A | xiv |
| | 221 A | xiii | William | | |
| iron-bearing..... | 8, 127 c | xiv | Evidence by, before R. C. <i>re</i> :— | | |
| petrography..... | 149, 150 | vii | gold, L. Huron..... | 114 | R C |
| Scenery of and squalls on..... | 267 | vi | mineral lands..... | 315 | R C |
| Power Co. | | | technical education..... | 428 | R C |
| Plant of, completed 1905..... | 13 A | xv | | | |

| | Page. | Vol. |
|---|-----------------|------|
| Ward gold mine, WAWA LAKE, MICHICOTEN DIV. | | |
| Notes on, 1898 | 146 | viii |
| Wardell, C. | 105 | vii |
| Warden tp., Nip. | | |
| Analysis of soil from | 246 A | xiv |
| Wardle, John | | |
| Brick-yard of, Blenheim | 72 B | xv |
| Wardman, T. | 106 | vii |
| | 105 | viii |
| Ware, L. H. | | |
| Brick-yard of, Huntsville | 89 B | xv |
| tp., TH. B. D. | | |
| Iron ore in | 69 | ii |
| H. L. Smith's views. | 77 | ii |
| Warina, ROXBOROUGH TP., STORMONT CO. | | |
| Ballast pit at, notes | 219, 220 | x |
| Saxicava sand at | 227 | x |
| Wark tp., ALGOMA. | | |
| Explorations in, notes by McMillan | 190, 191 A | xiv |
| Soil in, muskeg | 186, 209, 220 A | xiv |
| requires drainage | 207 A | xiv |
| Trees in | 220 A | xiv |
| Warkworth, PERCY TP., NORTHUMBERLAND CO. | | |
| Gravel deposits near | 231 A | xiii |
| Warmington Stone and Marble Co. | | |
| Work by, Garden river | 83, 228 | R C |
| Warners, N.Y. | | |
| Paving clay from, analysis | 120 | iii |
| Warren, G. | 78 | x |
| M. A. Myers See Consolidated Mines Co. | | |
| S. | 118 | ix |
| | 144 | x |
| | 75 | xi |
| lake (glacial). | | |
| Area of, outlets of | 136, 137 | vi |
| Beaches of | 152 | viii |
| | 104 C | xiv |
| altitude | 103 C | xiv |
| Deposits of, Nipigon Lake dist. | 135, 148 A | xvi |
| Grounded icebergs in | 112 | vi |
| Wawa lake once a bay of | 196 A | xv |
| tool factory, SCOOTAMATA RIVER, MOIRA RIVER. | 98 | vii |
| Warsaw, DUMMER TP., PETERBORO CO. | | |
| Limestone from, for Otonabee canal | 97 B | xiii |
| Wart lake, S. OF KAPISKASING LAKE, ALG. | | |
| Description of | 138 | ix |
| Forest fires near | 142 | ix |
| Notes on, by Charlton, jr. | 202 | viii |
| Waterpower near | 142 | ix |
| Warwick & Son. | | |
| Brick-yard of, London, Ont. | 81 B | xv |
| Warwick tp., LAMETON CO. | | |
| Hamilton formation in | 99 A | xiv |
| Wash mills. | | |
| In cement making, notes | 125 A | xiv |
| Washaigamog lake. See Fairbank lake. | | |

| | Page. | Vol. |
|---|------------|------|
| Washington, Dr. H. S. | | |
| Acknowledgments to | 187 | ix |
| | 208 | xi |
| Analysis by, of heronite | 189 | ix |
| S. F. | 118 | ix |
| State, U. S. | | |
| Arsenic plant in | 31 B | xiv |
| Arsenical ores in | 102 | xi |
| Washington, U. S. | | |
| Brick pavements in | 108, 109 | iii |
| Nickel steel experiments at. See Gamgee, and Ritchie. | | |
| University, St. Louis. | | |
| Notes on, by Mathers. | 505, 506 | R C |
| Richards. | 512 | R C |
| Wastabaskinan chute, NETOGAMI RIVER, ALG. | 137 A | xiii |
| Waswanipi river, NOTTAWAY RIVER, QUE. | | |
| Timber in valley of | 204 | v |
| Wataybeeg lake, WATAYBEEG RIVER, BLACK RIVER, NIP. | | |
| Rocks on | 119 A | xiii |
| petrography | 117 A | xiii |
| Route from, to Black river. | 113 A | xiii |
| river, BLACK RIVER, NIP. | | |
| Description of | 111 A | xiii |
| Glacial striae on | 115 A | xiii |
| Notes on, by Kay. | 113 A | xiii |
| Rocks on and near | 117, 119 A | xiii |
| Water. See also Artesian water and Springs. | | |
| Artesian, quality of | 54, 55 | i |
| Boring for, notes on | 127, 128 | i |
| Coolgardie gold field, W. A., scarcity of | 8 | v |
| Composition of | 447 | R C |
| Effect of, on diorite, diagram .. | 189 | xi |
| In natural gas, method for eliminating | 106 | ix |
| Leamington, analysis | 58 | i |
| Paris, Ont. | 148 | xii |
| Rainy lake | 44 | iv |
| Raleigh tp., analysis | 57 | i |
| St. Thomas | 60 | i |
| mineral or medicinal | | |
| Analysis of various | 204, 205 | ix |
| Canada, production | 525 | R C |
| James Bay basin | 156 A | xiii |
| Knox tp., east of | 235 A | xvi |
| Mattagami river | 154 A | xiii |
| Occurrences | 59-62 | i |
| Port Arthur silver mines. | 54 B | xiv |
| Port Colborne | 59, 129 | i |
| Wabigoon, near | 171 | vii |
| salt | | |
| Ancaster (near), analysis | 204 | ix |
| Blanche River region | 224 | xi |
| Gas and oil wells | 105 | ix |
| | 104 A | xiv |
| Whitby, analysis | 204 | ix |
| Windsor | 59 | i |
| =closets. | | |
| Moss-litter for | 139 | iii |
| =cooled furnace. | | |
| Construction of | 376 | R C |
| gas. | | |
| As fuel for smelting | 380 | R C |
| Cost of production | 391 | R C |

| | Page. | Vol. |
|--|------------|------|
| Water lily. | | |
| Gold creek, Matawin river..... | 129 | v |
| Reed lake..... | 200 A | xv |
| white | | |
| Rainy Lake region..... | 96 | iv |
| yellow pond | | |
| Abitibi dist..... | 241, 253 A | xiv |
| Mattagami valley..... | 150 A | xv |
| Rainy Lake region..... | 96 | iv |
| lime formation. See Lower Helderberg. | | |
| Waterbury valley, PENN. | | |
| Nickel and white metal industry in..... | 161 | ii |
| Waterdown, E. FLAMBOROUGH TP., WESTWORTH CO. | | |
| Beach at..... | 229 A | xiii |
| Medina shale at..... | 116, 117 B | xv |
| analysis..... | 8 B | xv |
| Waterford, TOWNSEND TP., NORFOLK CO. | | |
| Stratified gravels near..... | 142 | xii |
| | 83 B | xiii |
| Waterford Oil and Gas Well Co. | | |
| Capital and date of charter..... | 37 A | xiii |
| Waterhen creek, MATTAGAMI RIVER, ALG. | | |
| Description of main river near..... | 118 A | xv |
| Ruby silver on, trace..... | 131, 132 A | xv |
| Soil from, character and analysis..... | 151-154 A | xv |
| Timber south of..... | 139 A | xv |
| lake, W. OF MATTAGAMI RIVER, ALG. | | |
| Country around, description.... | 128 | ix |
| Waterloo, BELGIUM. | 164 | i |
| Waterloo, N. WATERLOO TP., WATERLOO CO. | | |
| Artesian wells in..... | 59 | i |
| Brick-yard in, notes..... | 102-104 B | xv |
| analysis of clay for..... | 14 B | xv |
| Onondaga formation near..... | 117 B | xiii |
| co. | | |
| Limestone in, notes by Miller..... | 114-116 B | xiii |
| Peat in..... | 209 | ii |
| County Mining Syn. | | |
| Interested in water-power, Michipicoten falls..... | 72 | xi |
| Zagloba claim owned by..... | 138 | x |
| Mg. Co. | | |
| Capital and date of charter..... | 30 A | xvi |
| tps., WATERLOO CO. | | |
| Artesian wells in. See Preston. | | |
| Lime kilns in. See Hespeler. | | |
| Onondaga formation in. See Doon. | | |
| Waterous Engine Co. | 68 B | xv |
| Waterpower. | | |
| Abitibi river..... | 193 | viii |
| | 208, 209 A | xiv |
| Couchiching falls..... | 235 A | xiv |
| Iroquois falls..... | 230, 231 A | xiv |
| An element of manufacturing prosperity, instances..... | 485 | R C |
| Bellegarde, France..... | 485 | R C |
| Big Turtle lake, near..... | 127 | vii |
| Black river, Nip..... | 186, 188 | xii |
| Blind river, L. Huron..... | 98 | xii |

| | Page. | Vol. |
|----------------------------------|---------------|------|
| Waterpower.---Con. | | |
| Bracebridge, photo of wheel.... | 82 B | xv |
| Calcium carbide produced by.... | 31 | vi |
| Barleigh falls..... | 213 | viii |
| Chaudière falls..... | 36 A | xi |
| Germany..... | 36 A | xi |
| Niagara falls..... | 37, 38 | v |
| | 36 A | xi |
| Credit river..... | 13 Bull. | iii |
| Crow river..... | 56 | iii |
| Deer lake, Peterboro' co..... | 92 | ix |
| | 27, 188 | xi |
| | 14 | xii |
| | 14 A | xv |
| Gananoque river..... | 292 | xi |
| Grand river..... | 279 | vi |
| Ground-hog river..... | 142 | ix |
| Gull river..... | 33 | xii |
| | 17 A | xiii |
| | 18 B | xiii |
| | 157 A | xiv |
| Kagawong lake..... | 80 B | xiii |
| Kaministiquia river..... | 133 | v |
| | 133, 252 | vii |
| plant..... | 13 A | xv |
| L. of the Woods, Keewatin.... | 53 | vi |
| Lake on the Mountain..... | 240 A | xiii |
| Little Wabigoon river..... | 126 | vii |
| Madawaska river and tribs.... | 66 | vi |
| | 218 | vii |
| | 237 | viii |
| for Black Donald mine..... | 27 | xi |
| | 26 | xii |
| | 87 A | xiv |
| | 14 A | xv |
| from Mountain chute..... | 27, 293 | xi |
| | 133 | xii |
| photo..... | 222 | vii |
| suggested use of..... | 390, 391 | R C |
| York river..... | 66 | vi |
| | 215, 220, 237 | viii |
| See also High falls. | | |
| Ragged chute. | | |
| Manitou lake (Harrison falls)... | 123 | vii |
| Mattawin river..... | 132, 133 | v |
| Mattagami lake..... | 132, 142 | ix |
| Mattagami river..... | 142 | ix |
| | 128, 129 A | xv |
| Michipicoten div..... | 206 | vii |
| Batchawana river..... | 201 | viii |
| Dog river..... | 13 Bull. | iii |
| | 299 A | xiv |
| Magpie river..... | 299 A | xiv |
| Michipicoten river..... | 13 Bull. | iii |
| | 72 | xi |
| | 222 A | xiii |
| | 68 A | xiv |
| | 67 A | xv |
| | 68 A | xvi |
| photo..... | 169 A | xvi |
| Mississagi river..... | 25 | vii |
| Baboon falls..... | 149 | viii |
| Mississippi river, Ont..... | 390 | R C |
| Moose River basin..... | 145 A | xiii |
| Northern Ontario, notes by Blue. | | |
| | 13, 14 A | xv |
| Opasatika river..... | 136 A | xiii |
| Pishkanogema river..... | 142 | ix |
| Pukaskwa river..... | 299 A | xiv |

| | Page. | Vol. | | Page. | Vol. |
|---|--------------|------|---|------------|------|
| Waterpower. — <i>Con.</i> | | | Watson (Rocky) lake, WINDIGOKAN | | |
| Rainy river..... | 162 | v | LAKE, TH. B.D. | | |
| Rocky Saugeen river..... | 33 | xi | Iron range near..... | 144, 145 A | xvi |
| Sable river..... | 120 | x | Minor ref. to..... | 138 A | xvi |
| St. Mary river..... | 37 | v | Watt, James | xxi, 358 | R C |
| | 61 | x | and Smith. | | |
| | 91 | xi | Brick-yard of, Attercliffe, notes..... | 77, 78 B | xv |
| Sawbill lake..... | 66 | vii | Watten tp., R. R. D. | | |
| | 90 | viii | Iron in..... | 134 | xi |
| Scootamatta river..... | 98 | viii | | 309 | xii |
| Seine river..... | 43 | iv | mining..... | 266 | xi |
| Sudbury dist..... | 10, 68-71 A | xiv | pyrites..... | 175 A | xvi |
| | 51-63 A | xv | <i>See also</i> Nickel lake. | | |
| | 39 A | xvi | Surveyed, 1903..... | 40, 55 | iv |
| Spanish river..... | 13, 62, 63 A | xv | Tale in..... | 76, 85 | iv |
| | 10, 69 A | xiv | | | |
| | 141 C | xiv | Watts, Edward | | |
| Vermilion river, photo..... | 72 C | xiv | Apatite mining by, Bobs lake... .. | 239 | i |
| Trent canal..... | 149 A | xiv | Edward | | |
| United States, various localities .. | 485 | R C | Mica mining by, N. Burgess tp... .. | 132 | x |
| Wabigoon river..... | 118 | iv | | 89 A | xvi |
| Wanapitei river..... | 138 | vii | Edward | | |
| | 67 A | xvi | Silver mining by, Coleman tp... .. | 80 A | xv |
| Young, Point..... | 32 | xi | and Allan. <i>See</i> Watts silver | | |
| mt., NEAR BOYER LAKE, MICHIPICOTEN DIV..... | 255 | viii | mine, Coleman tp. | | |
| Waters, John | 26 A | xiv | and Noble. | | |
| T. | | | Mica mining by. <i>See</i> Watts, Ed- | | |
| Ref. to article by, on separation | | | ward | | |
| of magnetic ores..... | 340 | xii | Mines, Ltd. | | |
| T. F..... | 82 | ix | Capital and date of charter | 31 A | xvi |
| T. J. | | | silver mine, COLEMAN TP., NIP. | | |
| Mica mining, N. Burgess tp... .. | 245 | i | Notes on, 1905..... | 80 A | xv |
| | 252 | ii | Shipping..... | 16 B | xiv |
| | 277, 278 | v | | 7 A | iv |
| tp., SUDBURY DIST. | | | Watzke, O. Anton | 100 | x |
| Copper and nickel in....24, 105, 433 | | R C | Waubamik, McDougall tp., P.S.D. | | |
| mining..... | 64 A | xv | Mica mining near..... | 279, 280 | v |
| Crystalline schists in | 80 | i | Waupoons, Marysburg tp. | | |
| Gold, silver and galena in | 112 | R C | Beach at..... | 240 A | xiii |
| Norite in..... | 242 | xii | Waves. | | |
| Quartz mining in, for flux..... | 64 A | xvi | Effect of, near Scarborough, Ont. .. | 230 A | xiii |
| Watersheds. | | | L. Superior, power of..... | 147, 156 | viii |
| New Ontario..... | 201 | v | Wavy rapid, Missinaibi river, ALG. | | |
| Watertown, JEFFERSON CO., N. Y. | | | Wawa, Wawa lake, MICHIPICOTEN | | |
| Altitude of beach at..... | 234 A | xiii | DIV. | | |
| Ballast pits at..... | 238 A | xiii | Beaches near, altitude..... | 196 A | xv |
| Glaciation north of..... | 237 A | xiii | Character of country around.... | 153 | xi |
| Waterworks. | | | Formation of..... | 100, 146 | viii |
| Affecting insurance rates..... | 55 | i | | 175 A | xv |
| Watson. | | | Gold prospecting near | 194 | vii |
| John..... | 84 | viii | Pleistocene deposits near..... | 184 | xi |
| Hon. Robert | | | sandy plain..... | 201 A | xv |
| Gold mining by, The New Klon- | | | Rocks at and near..... | 146 | viii |
| dike..... | 72 | viii | Contact, Huronian-Laurentian... .. | 151 | xi |
| and Hutchinson. | | | Route from, to Missinaibi... .. | 202 A | xv |
| Brick-yard of, Bracebridge, notes. | | | creek, MICHIPICOTEN RIVER, | | |
| | 82, 83 B | xv | ALG. | | |
| Clay working by..... | 41 B | xv | Fall on, height of..... | 193 | vii |
| analysis..... | 18, 27 B | xv | Gold prospecting on..... | 114 | ix |
| Watson gold mine, THE NEW KLON- | | | Gold Mining Co. | | |
| DIKE, R. R. D. | | | Capital and date of charter..... | 10 | viii |
| See also Golden Whale mine. | | | Licence to | 105 | viii |
| Notes on, 1897..... | 77 | vii | Work by, 1898..... | 101 | viii |
| 1898..... | 72, 73 | viii | | 112, 114 | ix |
| iron mine, CHRISTIE LAKE, | | | lake, MICHIPICOTEN DIV. | | |
| LANARE CO. | | | Altitude of..... | 193 | vii |
| Magnetic ore in | 46 | ii | | 157, 176 | ix |
| Notes on, by Vennor..... | 47 | ii | | 153 | xi |

| | Page. | Vol. | | Page. | Vol. |
|---|---------------|------|--|------------|------|
| Wawa lake. — <i>See on.</i> | | | WD 35, 37, 150, 231, 238, 239, | | |
| Beach on and near..... | 154 | viii | 241, 242, 251 nickel locs., | | |
| | 175 | ix | BOWELL TP., NIP..... | 200 A | xiii |
| 201, 202 A..... | xv | | | 69, 70 c | xiv |
| altitude..... | 176 | ix | 44 gold loc. <i>See</i> Crystal mine. | | |
| damming it..... | 7 Bull. | iii | 152 nickel loc., BOWELL TP., | | |
| | 204 | vii | NIP..... | 114 c | xiv |
| | 184 | xi | 155 nickel loc., BOWELL TP., | | |
| Boulder near, of jasper and | | | NIP..... | 121 c | xiv |
| hematite..... | 206 | vii | 234 nickel loc., FOY TP., NIP..... | 70 c | xiv |
| Coal near, wrongly reported..... | 158 | xi | 252 nickel loc. <i>See</i> Prue's | | |
| Galena reported on..... | 60 | xii | mine. | | |
| Gold on..... | 11 Bull. | iii | 271 gold loc. <i>See</i> Big Dan | | |
| | 184 | vii | mine. | | |
| mining..... | 101, 195 | vii | 359 iron loc., MORIN LAKE, | | |
| | 100-102 | viii | ALG..... | 224 A | xiii |
| maps showing | | | 404, 405 iron locs., JAMES | | |
| claims..... | 121 | viii | LAKE, TIMAGAMI DIST., NIP. 20, | 88 A | xv |
| notes by Willmott..... | 205 | vii | 460-465 arsenic loc. <i>See</i> | | |
| prospecting..... | 174 A | xv | Little Dan mine. | | |
| early.. | 9 Bull. | iii | | | |
| <i>See also</i> Wawa Gold Mfg. Co. | | | Weadock, George W. | | |
| Iron ore near, with jasper..... | 11 Bull. | iii | Gold mining by, Seine River dist. | 81 | ix |
| pyrites on (reported)..... | 60 | xii | Vice-president, Jack Lake Gold | | |
| Photo of..... | 140, 141 | vii | Mg. Co..... | 106 | x |
| Rocks on and near..... | 203 | vii | | 148 | xi |
| | 156 | ix | | 82 | xii |
| conglomerate..... | 141 | viii | | 99 | xii |
| granite, petrography..... | 176 | xi | Wearne, W. | | |
| Huronian..... | 156-158, 166, | xi | Weasichawan fall, LITTLE MISSIN- | | |
| landing, MICHIPICOTEN RIVER. | | | AIBI RIVER..... | 140 | ix |
| Photo of..... | 156, 157 | vii | Webb, G. F. | 28 | xii |
| tuff. | | | J. E. | | |
| Character of..... | 114 A | xvi | Brick works of, Toronto..... | 109, 110 B | xv |
| Description, distribution and | | | clay for, analysis..... | 8 B | xv |
| position..... | 155, 157 | xi | William Walter | 100 | iii |
| | 174 A | xiv | | | |
| Goetz claims, Michipicoten div..... | 181 A | xv | Webber, John | | |
| Minor ref. to..... | 300, 301 A | xiv | Molybdenite mining by, Laxton | | |
| Petrography..... | 179, 180 | xi | tp..... | 25 | xii |
| Wawashkaise (LITTLE DEER) lake, | | | Weber—? | 193 | i |
| BURTON TP., P.S.D. | | | Webster, Frank | 97 | i |
| Limestone in..... | 93 B | xiii | | 74 B | xiii |
| Wawayeshatching lake, E. of | | | J. H..... | 29 | iii |
| GROUND-HOG RIVER, ALG..... | 130, 133 | ix | J. W..... | 234 | ii |
| Wawiatan rapid, MATTAGAMI RIVER, | | | James..... | 121 B | xiii |
| ALG. | | | P. W..... | 42 | ix |
| Nomenclature of..... | 127 | ix | Stephen..... | 97 | i |
| Waterpower at..... | 142 | ix | | 74 B | xiii |
| Wax. | | | W. J..... | 250 | ii |
| Heating power of..... | 481 | R C | and Angell..... | 30 | iii |
| Waxwing, Cedar | | | F. W. & Co. | | |
| Abitibi dist..... | 126 A | xiii | Mica mining by..... | 192 | iii |
| | 243 A | xiv | | 98 | vii |
| Wayne co., N. Y. | | | | 131-134 | x |
| Iron smelting in..... | 323 | R C | | 289 | xi |
| Iron and Steel Mill, PITTS- | | | Canton mine..... | 129 | xii |
| BURO. | | | | 195 | iii |
| Labour employed at, statistics... | 370 | R C | | 276 | v |
| Waynesburg Brick and Clay Mfg. | | | | 68 A | xvi |
| Co. | | | Grant mine..... | 278 | v |
| Analysis of shale used by..... | 119 | iii | Stonestess mine..... | 133 | x |
| WB 7 iron loc., STANDING-STONE | | | trimming works..... | 135 | x |
| LAKE, TH. B. D. | 126 A | xvi | | 291 | xi |
| WD nickel loc., NEAR JOE LAKE, | | | | 131 | xii |
| WISNER TP., NIP..... | 202 A | xiii | | 106 A | xv |
| | 72 c | xiv | | 91 A | xvi |
| 25, 40 gold locs. <i>See</i> Eagle | | | Sydenham, sold..... | 291 | xi |
| Nest mine. | | | | | |
| | | | Webster, N. CAROLINA. | | |
| | | | Nickel near..... | 131 | ii |

| | Page. | Vol. | | Page. | Vol. |
|--|----------|------|--|------------|------|
| Webbwood, HALLAM TP., ALG. | | | Welland. — <i>Com.</i> | | |
| Agricultural land near..... | 103 | iv | Peat bog of. <i>Com.</i> | | |
| Clay near, Saugeen..... | 22 B | xv | photos..... | 192 | vi |
| Gold near..... | 5 A | xiii | plant..... | 192 | xii |
| mining. <i>See</i> Shakespeare mine. | | | tests on..... | 231 | xii |
| Pulp mill at..... | 13 A | xv | 28 A | xiii | |
| photo..... | 22 B | xv | Acetylene Gas Machine Co. | 190 | vi |
| Slate near..... | 93 C | xiv | canal, WELLAND AND LINCOLN | 20 | vii |
| Webbwood falls, SPANISH RIVER. | | | cos. | | |
| Waterpower plant at..... | 13 A | xv | Limestone on, Corniferous..... | 34 | xi |
| Webbwood General Mg. and De- | | | fossiliferous..... | 117 B | xiii |
| velopment Co. | | | Niagara..... | 125 B | xiii |
| Capital and date of charter..... | 13 | vii | Peat along..... | 191 | i |
| Wedding, Dr. H. | | | 209 | ii | |
| Ref. to paper by, on magnetic | | | <i>See also</i> Welland. | | |
| concentration..... | 340 | xii | Power from, for Willson Carbide | | |
| Wederkinch, Carl O. | 152, 153 | vi | Co..... | 36 A | xi |
| Weeds. | | | co. | | |
| Destroyers of, arsenic in..... | 114 | xi | Brick-yard in, notes..... | 104, 105 B | xv |
| formula for a cheap..... | 115 | xi | Limestone in, Corniferous..... | 25 B | xiii |
| Night-hawk lake..... | 123 A | xiii | notes by Miller..... | 116-120 B | xiii |
| Weekes, M. B. | 7, 61 | xi | Natural gas in. <i>See</i> Welland gas | | |
| Weeks, Joseph D. | 151 | R C | field. | | |
| T. C. | 156 | vi | Oil in, boring for..... | 99, 100 A | xiv |
| Weese, George W. | 99 A | xv | 113 A | xv | |
| Peter..... | 31 | ix | Peat in..... | 209 | ii |
| Weesian, Toussaint (Indian) | 136, 142 | viii | County Lime Works Co. | | |
| Weiden, J. | 267 | v | Capital and date of charter..... | 9 | x |
| Weidenhammer, Peter | 74 B | xiv | Lime producing, Port Colborne, | | |
| Weidman, James. | 220 | iv | 1902..... | 98 | xii |
| | 37 | ix | Natural gas used by..... | 91 A | xiv |
| Weigel, W. | 91 A | xv | 23 A | xv | |
| Weilburg, GERMANY. | 352 | R C | (CHIPPAWA) creek, WELLAND | | |
| Weill, Henry | 127 A | xvi | co. | | |
| Weinbach river, GERMANY. | 352 | R C | Limestone on..... | 125 B | xiii |
| Wekwemiking, MANITOULIN ISLAND, | | | gas field, WELLAND CO. | | |
| L. HIRON. | | | Natural gas of..... | 4 | i |
| Boring near, for oil..... | 72, 73 A | xv | boring for..... | 99, 100 A | xiv |
| Welch iron mine, NEAR MADOC, HAS- | | | 113 A | xv | |
| TINGS CO. | | | industry, 1895..... | 28 | v |
| Notes on, 1898..... | 32 | viii | 1899..... | 106 | ix |
| property, NEAR SMITHS FALLS. | | | notes..... | 136 | i |
| Fossil whale from..... | 217 | x | 20, 21 | x | |
| Welcome channel, L. OF THE | | | 22 A | xiii | |
| WOODS..... | 104 | vi | by Corkill. 90, 91, 99, 102-105 | A | xiv |
| lake, W. OF WANAPITEI RIVER, | | | production, 1892..... | 10 | ii |
| NIP. | | | 1897..... | 19 | vii |
| Ancient valley south of..... | 182 | vi | 1899..... | 23 | ix |
| Map of, sketch..... | 171 | vi | report by Stiff..... | 44, 45 | xi |
| Photo of part of..... | 176, 177 | vi | rock pressure of..... | 96 A | xiv |
| Pike in..... | 170 | vi | wells, number, 1902..... | 39 | xii |
| Rocks on..... | 172 | vi | 1906..... | 25 A | xvi |
| Striae on, direction..... | 181 | vi | Wellesley, Arthur | 165 | i |
| Well drilling. <i>See</i> Boring. | | | Wellington, Cyrus | 75 | viii |
| Welland, CROWLAND TP., WELLAND | | | Stephen | | |
| co. | | | Fluorspar mining by, Madoc tp. | 106 A | xv |
| Calcite in..... | | | Henderson talc mine worked by. | 87 A | xiv |
| Meteorite near, notes on..... | 203 | ix | 106 A | xv | |
| Natural gas near..... | 126, 136 | i | 91 A | xvi | |
| supply of..... | 44 | xi | Iron bounties paid to, 1901..... | 26 | xi |
| 91 A | xiv | | mining by, Madoc tp..... | 154 A | xvi |
| Peat bog of:— | | | St. Charles mine..... | 261 | xi |
| analysis..... | 202 | xii | 20, 115 | xii | |
| cost of briquetting..... | 225 | xii | Seymour mine..... | 129 | x |
| method of working..... | | | and Henderson. | | |
| 209-211, 216-219 | xii | | Pyrites mining by, Dalhousie tp. | 164 A | xvi |
| notes..... | 203 | xii | | | |
| 30, 31 A | xiii | | | | |

| | Page. | Vol. |
|---|----------|--------|
| Wellington, Hillier tp., Prince Edward co. | | |
| Beach at..... | 240 | A xiii |
| Wellington, LORAIN CO., OHIO. | | |
| Corniferous formation at, thick- ness..... | 156 | i |
| co. | | |
| Limestone in, notes by Miller.... | 120-123 | B xiii |
| copper mine, BRUCE MINES | | |
| DISC., ALG. | | |
| Copper in, chalcopryite..... | 196 | ix |
| mode of occurrence..... | 175 | i |
| Evidence <i>re</i> , before R.C.... | 100, 101 | R C |
| Limestone near..... | 160 | viii |
| Nomenclature of..... | 96 | R C |
| Notes on, by Bell..... | 23 | R C |
| Blue..... | 36, 37 | iii |
| Coleman..... | 125 | viii |
| Merritt..... | 91 | R C |
| Smelting process at, failure of.... | 378 | R C |
| pyrites claim, MADOC TP., | | |
| HASTINGS CO. | | |
| Notes on..... | 161 | A xvi |
| quarry, PUSLINCHGORE, WELL- | | |
| INGTON CO. | | |
| Analysis of limestone from..... | 122 | B xiii |
| st., BRANTFORD. | | |
| Log of gas well in..... | 107 | A xiv |
| st., OTTAWA. | | |
| Mica trimming works in..... | 91 | A xvi |
| Wellman, Charles. | 31 | vii |
| Wells, J. Walter | | |
| Analysis by, of:— | | |
| copper ore, McConkey tp..... | 171 | ix |
| corundum..... | 238 | vii |
| limestones, Eastern Ont..... | 156 | xii |
| magnetite, Timagami island.. | 169 | x |
| sperrylite, Denison tp..... | 181 | R C |
| | 209 | ix |
| Assays by, of:— | | |
| auriferous deposits, Vermilion | | |
| river..... | 152, 153 | x |
| gravel and sand, Savant lake. | 90 | xii |
| iron ores, Timagami dist..... | 180 | x |
| Notes by, on Canada Corundum | | |
| Co..... | 20 | ix |
| Paper by, on arsenic in Ont.. | 101-122 | xi |
| ref. to..... | 32 | B xiv |
| on magnetic concen- | | |
| tration of iron ores..... | 332-342 | xii |
| Report by, on Provincial Assay | | |
| office:— | | |
| 1898..... | 284-289 | viii |
| 1900..... | 148-150 | x |
| 1901..... | 76-79 | xi |
| 1902..... | 68-72 | xii |
| Resignation of..... | 72 | xii |
| Sperrylite found by, from Deni- | | |
| son tp. | 92 | i |
| named by..... | 282 | xii |
| Test by, of Merrielfield gas gener- | | |
| ator..... | 231 | xii |
| Work by, 1900..... | 6 | x |
| 1901..... | 7, 90 | xi |
| 1902..... | 4-6 | xii |
| tp..... | 165 | xii |
| Welsh, T. J. | | |
| Brick making by, Peterboro.... | 95 | B xv |

| | Page. | Vol. |
|---|----------|--------|
| Wendigo, NIP. | | |
| Route from, to Larder lake, de- scription..... | 203 | A xvi |
| gold mine, WITCH BAY, L. OF | | |
| THE WOODS. | | |
| Notes on, 1899..... | 44 | ix |
| 1900..... | 71, 72 | x |
| 1902..... | 96 | xii |
| lake, S. OF LARDER LAKE, NIP. | | |
| Cobalt on..... | 35 | B xiv |
| | 218 | A xvi |
| Description of..... | 217 | xi |
| Gold north of, discovery..... | 203 | A xvi |
| Rocks south of, metamorphosed. | 38 | B xiv |
| Route from, to Larder lake. | 202, 203 | A xvi |
| Mines of Ontario, Ltd. | | |
| Capital and date of charter..... | 9 | x |
| Progressive Mg. and Dev. | | |
| Co. | | |
| Capital and date of charter..... | 30 | A xvi |
| Silver and Copper Mg. Co. | | |
| Capital and date of charter..... | 31 | A xvi |
| Wendt, A. F. | | |
| Ref. to work by, on magnetic | | |
| concentration..... | 237 | xii |
| Wenebegon river, MISSISSAGI RIVER, | | |
| ALG. | | |
| Bears near..... | 172 | xii |
| Description of, by Graton.. | 166, 167 | xii |
| Photo of..... | 160, 161 | xii |
| Wenstrom Magnetic separator. | | |
| Description of..... | 349, 350 | R C |
| | 228 | xii |
| Wentworth co. | | |
| Brick-yards in, notes..... | 105, 106 | B xv |
| Limestone in, notes by Miller.... | 123-126 | B xiii |
| Wentz, R. F. | 33 | xii |
| | 18 | A xiii |
| Wequemaking bay, MANITOULIN IS- | | |
| LAND. | | |
| Rocks on..... | 76 | B xiii |
| Werner, A. G. | | |
| Views of, <i>re</i> origin of metallifer- | | |
| ous veins..... | 171, 172 | i |
| Wernerite. See Scapolite. | | |
| Weslenkoon lake, ASHBY TP., ADD- | | |
| INGTON CO. | | |
| Granite near..... | 225 | viii |
| Wesley tp., NIP. | | |
| Mistogo river in, description. | 202, 203 | A xiv |
| Soil in, analysis..... | 247 | A xiv |
| and trees..... | 232 | A xiv |
| West, J. H. | 214 | v |
| W. | 29 | xii |
| Bay, MANITOULIN ISLAND, ALG. | | |
| Rocks at and near..... | 76, 78 | B xiii |
| Section near..... | 79 | B xiii |
| Canada Mining Co. | | |
| Affected by fall of copper..... | 97 | R C |
| Bruce mines bought by, 1865.... | 95 | R C |
| Notes on mines of..... | 91 | i |
| Smelting operations of..... | 403 | R C |
| End Mining Co. | | |
| Capital and date of charter..... | 13 | vii |
| Work by, 1898..... | 96 | viii |
| End silver mine, SILVER MT., | | |
| LYESTER TP., TH. B. D. | | |
| Animikie formation in..... | 35 | R C |

| | Page. | Vol. | | Page. | Vol. |
|--|---------|-------|--|---------------|------|
| West End silver mine. — <i>Con.</i> | | | Westmeath tp., RENFREW CO. | | |
| Controlled by Consolidated Mines Co. | 19 | xi | Actinolite in..... | 192 | ix |
| Depth of, 1899..... | 96 | xii | Limestone in..... | 102 B | xiii |
| Evidence <i>re</i> , before R.C. 196, 199, 202 | 35 | ix | Marl in, analysis..... | 107 B | xiii |
| Exhibit from, at Buffalo..... | 86 | xi | Peat bog in..... | 190 | i |
| Labour employed at, 1898..... | 280 | viii | | 198 | ii |
| Management of, energetic..... | 428 | R C | Westminster Mining Co. | | |
| Notes on, 1891..... | 227 | i | Capital and date of charter..... | 10 | viii |
| 1892..... | 239 | ii | Weston, YORK TP., YORK CO. | | |
| 1898..... 50, 96-98, 275 | viii | | Iroquois beach at..... | 229 A | xiii |
| 1899..... | 84 | ix | Limestone at..... | 126 B | xiii |
| 1900..... 108, 109 | x | | Westport Mfg. and Developing Co. | | |
| 1901..... 257, 258 | xi | | Capital and date of charter..... | 11 | xi |
| 1902..... 16, 97 | xii | | Wet Process Reduction Co. | | |
| 1906 and photo..... 61, 62 | A xvi | | Capital and date of charter..... | 30 A | xvi |
| Operating, 1905..... | 5 A | xv | Wetherill separator. | | |
| Producing, 1906..... | 8 A | xvi | Diagram of..... | 336, 337 | xii |
| Section of..... | 83 | ix | For corundum..... | 244 | vii |
| Huntingdon, HUNTINGDON TP., HASTINGS CO. | | | Tests with, on iron ores of Ontario..... | 333-337 | xii |
| Beach near..... 227, 232-237 | A xiii | | Wettlaufer, A. | | |
| Silver Glance mine, STRANGE TP., TH. B.D. | 203 | R C | Brick-yard of, Blyth..... | 70 B | xv |
| Virginia, U. S. | | | Whale. | | |
| Brick pavements in cities of..... | 108 | iii | Cornwall, near (fossil)..... | 217, 219, 224 | x |
| Geological survey of, notes by Walker..... | 422 | R C | Hudson bay and strait..... | 133 | iv |
| Oil strikes in, affect prices..... | 18 | x | Smiths Falls, near (fossil)..... | 216, 219 | x |
| Shales of, analyses..... | 120 | iii | Whalen, James | 86 | ix |
| Winchester. See Winchester. | | | Whaley, A. | 103 A | xv |
| Westchester co., N. Y. | | | Wharnccliffe, WELLS TP., ALG. | 165 | xii |
| Corundum and emery in..... | 62 | vi | Wharton, Joseph | | |
| 211, 242..... | vii | | See also Wharton iron furnace | | |
| Westcott, G. | 67 | xii | Nickel exhibited by, 1876..... | 135 | ii |
| Thomas 100, 105 | viii | | mining by, Penn..... | 28 | vii |
| Westerfield, N. C. | 255 | xi | Sudbury..... | 213 | ix |
| (See also Independence gold mine). | | | prospecting by, U. S..... | 93 | vii |
| gold mine, MANITOU LAKE. | | | refinery of..... | 131 | ii |
| See Independence gold mine. | | | Sudbury dist..... | 146 c | xiv |
| Mining Investment Co. | | | sold to International Nickel Co..... | 27 | vii |
| Capital and date of charter..... | 11 | xi | 22..... | xi | |
| Western Australia. | | | 172 c..... | xiv | |
| Minerals in, royalties on (1890)..... | 44 | R C | 146..... | ii | |
| Mining laws of..... | 295 | R C | Notes by, on palladium..... | 6-8 A | xiv |
| Water scarcity of part of..... | 8 | v | Whartonite named after..... | 170 | ii |
| Oil and Coal Consolidated. | | | iron furnace, CAMDEN, N. J. | | |
| Capital and date of charter..... | 31 | A xvi | Concentration process at..... | 330 | xii |
| Ontario Mfg. Co. | | | Whartonite. | | |
| Capital and date of charter..... | 13 | vii | Analysis and description..... | 169, 170 | ii |
| Minor ref. to..... | 7 | vi | Sudbury ores..... | 281 | xii |
| Ontario Portland Cement Co. | | | 160 c..... | xiv | |
| Capital and date of charter..... | 37 A | xiii | 211..... | ix | |
| Notes on, 1905..... | 162 A | xiv | Blezard tp..... | | |
| Operating, 1906..... | 20 A | xvi | Wheal Mary mica mine, STORINGTON TP., FRONTENAC CO. | | |
| Plant of, extended, 1904..... | 18 A | xiv | Notes on, 1900..... | 133 | x |
| 1905..... | 17 A | xv | Wheat. | | |
| Peat Fuel Co. | | | Mentioned as growing at:— | | |
| Bog of, at Rondeau, notes..... | 206 | xii | Abitibi dist. (suitable for)..... | 253 A | xiv |
| Formation of..... | 9 | x | Abitibi lake..... | 50 A | xvi |
| Salt Co. | | | James bay..... | 107 | iv |
| Capital and date of charter..... | 24 A | xiii | Pringle tp..... | 170 | ix |
| Westinghouse Machine Co. | | | Rainy River dist..... | 65 | R C |
| Output of, 1893..... | 119 | ii | Rainy river..... | 163 | v |
| Westman, Charles | 67, 249 | vi | bird. | | |
| | | | Abitibi river, South of..... | 189 | xii |
| | | | Wheatland, MERCER CO., PENN. | | |
| | | | Corniferous formation at, thickness..... | | |

| | Page. | Vol. |
|--|----------|--------|
| Wheatley, ROMNEY TP., KENT CO. | | |
| Oil in..... | 90, 111 | A xiv |
| production, 1906..... | 24 | A xvi |
| Wheel ore. See Bonrnonite. | | |
| Wheeler, C. P. | 118 | ix |
| | 144 | x |
| | 75 | xi |
| D. C. | 105 | viii |
| H. W. | 248 | iv |
| J. M. | 243 | i |
| | 279 | vi |
| | 99 | vii |
| Wheeling, W. VIRGINIA. | | |
| Blast furnace near..... | 125 | ii |
| Brick pavement in..... | 107, 113 | iii |
| Whiskey creek, WHISKEY LAKE, | | |
| ALG..... | 63 | A xiv |
| island, L. OF THE WOODS. | 186 | v |
| lake, N. OF L. HURON, ALG. | | |
| Cobalt bloom on..... | 11 | A xv |
| Copper mining on..... | 98 | xii |
| | 62, 63 | A xiv |
| | 69, 70 | A xv |
| | 68, 72 | A xvi |
| Whiskeyjack lake, SEINE RIVER | | |
| DIST., R. R. D. | | |
| Description of, by Blue..... | 141 | v |
| Iron ore near..... | 265 | xi |
| Nomenclature of; rocks on..... | 73 | v |
| point, L. SUPERIOR, TH. B. D. | | |
| Rocks in vicinity of..... | 146 | ix |
| Whistle nickel mine, SELWYN LAKE, | | |
| NIP. | | |
| Geology of, notes by Coleman. | 74, 75 | C xiv |
| Plan of..... | 275 | xii |
| Purchase of..... | 56 | A xvi |
| Rocks of, and near..... | 274-276 | xii |
| | 203 | A xiii |
| norite..... | 112 | C xiv |
| Valley from, to Massey creek.... | 73 | C xiv |
| Whitby, WHITBY TP., ONTARIO CO. | | |
| Boring at, for gas..... | 152 | R C |
| Brick-yard at, notes on..... | 88 | B xv |
| Salt spring at, analysis..... | 204 | ix |
| Utica formation at and near..... | 42 | R C |
| tp., ONTARIO CO. | | |
| Limestone in..... | 40, 89 | B xiii |
| Stratified deposits in. See Myrtle. | | |
| Whitchurch tp., YORK CO. | | |
| Artesian wells in. See Newmarket. | | |
| White, Aubrey | | |
| Acknowledgments to..... | 167 | vi |
| Nomenclature by, Chaninies hill, | | |
| Que. | 219 | xi |
| Windigoosti- | | |
| gwan lake . | 138 | v |
| Visit of, to England..... | 5 | x |
| Mrs. E. C. | 106 | vii |
| F. | 106 | vii |
| Dr. F. A. | 23 | viii |
| | 46 | xii |
| Prof. I. C. | | |
| Views of, re anticlinal theory for | | |
| oil and gas..... | 149 | i |
| J. | 106 | vii |

White, James

| | Page. | Vol. |
|--|----------|--------|
| Refs. to "Altitudes in Canada" | | |
| by..... | 188 | vii |
| | 136 | viii |
| | 227 | A xiii |
| | 8 | C xiv |
| James (MINER) | 25, 26 | ix |
| Mrs. James | 57 | xii |
| Rev. James | 57 | xii |
| Neil | 121 | v |
| Peter | 262 | v |
| | 268 | vi |
| | 139 | vii |
| | 137 | xii |
| S. | | |
| T. B. | | |
| Quarrying by, in Anderdon tp.. | 126 | xi |
| Thos. F. | 157 | A xiv |
| W. G. | 80 | A xv |
| W. H. | | |
| Brick-yard of, Owen Sound..... | 66 | B xv |
| W. H. | | |
| Director of Naval Construction, | | |
| Eng. | 143 | ii |
| Statement by, re English armour | | |
| plate..... | 148 | iii |
| criticised..... | 158, 160 | iii |
| W. R. | 262 | v |
| | 57, 268 | vi |
| Bros. | | |
| Silver discovered by, Anvil lake. | | |
| Nip..... | 8 | A xvi |
| arsenic. | | |
| See also Arsenic. | | |
| Composition and value of..... | 32 | B xiv |
| Formula for..... | 31 | B xiv |
| Bear lake, TIMAGAMI DIST., | | |
| NIP. | | |
| Indian village on..... | 172 | ix |
| | 161 | x |
| Trees near..... | 174 | ix |
| Beaver lake, MONTREAL RIVER, | | |
| NIP. | | |
| Chalcedony on..... | 93 | i |
| | 196 | ix |
| Birch lake, PONTIAC CO., QUE. | | |
| Rocks on..... | 228 | xi |
| bloom. | | |
| Coleman tp., analysis..... | 18 | B xiv |
| Caribou-head river, MATTAGAMI RIVER, ALG. | 121 | A xv |
| =clay river, BLACK RIVER, | | |
| ABITIBI RIVER. | | |
| Description of, and vicinity.. | 183-185 | xii |
| =cloud island, COLPOY BAY, | | |
| GEORGIAN BAY. | | |
| Marl on..... | 140 | A xiv |
| falls, BLIND RIVER, L. HURON. | | |
| Waterpower on..... | 98 | xii |
| fish. See Whitefish. | | |
| =Howell furnace. | | |
| Description of..... | 107, 108 | xi |
| iron pyrites. See Marcasite. | | |
| lake, BEDFORD TP., FRONTENAC | | |
| CO. | | |
| Limestone on..... | 46 | i |
| lake, DUMMER TP., PETERBORO | | |
| CO. | | |
| Escarments on..... | 97 | B xiii |

| | Page. | Vol. |
|---|------------|------|
| White lake, HUNGERFORD TP., HASTINGS CO. | | |
| Cement on | 109 | i |
| Marl from | 137 A | xiv |
| lake, HUNTINGDON TP., HASTINGS CO. | | |
| Marl from | 122 A | xiv |
| analysis | 66 B | xiii |
| lake, LANARK AND RENFREW COS. | | |
| Iron ore on, probability of | 140 | R C |
| Marl in | 107 B | xiii |
| | 121 A | xiv |
| lake, MICHIGICOTEN DIV., ALG. | 242 | v |
| lake, OLDEN TP., FRONTENAC CO. | | |
| Marl on | 85 | R C |
| | 46 B | xiii |
| | 121 A | xiv |
| lake, TH. B. D. (NEAR TRUDEAU). | | |
| Explorations between, and Missinaibi, paper by Borron .. | 241-258 | v |
| Rocks on | 250 | v |
| lead. | | |
| Manufacture of | 463 | R C |
| ore. <i>See</i> Cerusite. | | |
| Lily gold mine, NEAR CROOKED-PINE LAKE, R. R. D. | | |
| Notes on | 56 A | xvi |
| Mg. and Milling Co. | | |
| Capital and date of charter | 30 A | xvi |
| metal. | | |
| Notes, by Levat, on manufacture of | 160, 161 | ii |
| Oak anticline, OHIO AND W. VIRGINIA. | 149 | i |
| Prospect gold mine, STURGEON LAKE, TH. B. D. | | |
| Notes on, 1902 | 84, 85 | xii |
| quarry, AMHERSTBURG, ESSEX CO. | | |
| Analysis of dolomite from | 42 B | xiii |
| Quality of stone from | 101 | i |
| River, MICHIGICOTEN DIV. | | |
| Coldest place in Ont. | 139 | viii |
| Indians at | 298 A | xiv |
| Minor refs. to | 136 | viii |
| | 289, 297 A | xiv |
| Rocks near | 253 | v |
| river, L. SUPERIOR. | | |
| Beaches on | 175, 176 | ix |
| Character of | 242 | v |
| Cold weather on | 112 | vi |
| Minor ref. to | 202 | v |
| Notes on, by Willmott | 139, 140 | viii |
| Rocks on | 250 | v |
| river, MISSISSAGI RIVER, L. HURON. | | |
| Beavers on | 172 | xii |
| Description of part of | 159, 160 | xii |
| river, TIMISKAMING LAKE. <i>See</i> Blanche river. | | |
| Rocks, The, MOOSE RIVER. | | |
| Gypsum at | 194 | viii |
| Rock lake, W. OF STURGEON LAKE, TH. B. D. | | |
| Minor ref. to | 137 | xi |
| Schists on | 165 | vii |
| petrography | 210 | x |

| | | | |
|---|------------|------|------|
| White Silver Co. | | | |
| Capital and date of charter | 26 A | xv | |
| <i>See also</i> Hargrave silver mine. | | | |
| Spruce harbour, L. SUPERIOR. | | | |
| Dike near, photo of eroded, ... | 168, 169 | viii | |
| Fishing station at, abandoned, ... | 134 | viii | |
| Notes on vicinity, ... | 112 | viii | |
| Spruce river, KAPISKASING RIVER, ALG. | | | |
| Forest fires on, ... | 177 A | xiii | |
| Sulphur Springs Co. | 61 | i | |
| Whitebear (INDIAN CHIEF) | 172 | ix | |
| Whiteclay creek, BLACK RIVER, ABITIBI RIVER. | 248 A | xiv | |
| Whiteaves, Dr. J. F. | | | |
| Acknowledgments to,..... | 127 | xi | |
| Fossils determined by, from:— | | | |
| Emerald lake,..... | 87 B | xiii | |
| Kawanaska river,..... | 186 | xii | |
| White-earth (WAHBAHKIMMUNG) lake, TH. B. D. | | | |
| Iron ore on,..... | 311 | xii | |
| Whitefish. | | | |
| Abitibi dist. | 127 A | xiii | |
| | 242 A | xiv | |
| James bay, streams entering ... | 133 | ix | |
| L. of the Woods,..... | 167, 169 | v | |
| | 97 | vi | |
| Shoal lake,..... | 51 | v | |
| L. Superior,..... | 147 | viii | |
| | 297 A | xiv | |
| Mattagami River dist. | 117 A | xv | |
| Kamiskotia lake | 119 A | xv | |
| Michipicoten div. | 206 | vii | |
| Dog lake | 297 A | xiv | |
| Windermere lake | 201 | viii | |
| Nipigon lake | 110 A | xvi | |
| Rainy lake and vicinity | 41, 97 | ix | |
| Timagami lake,..... | 58 | R C | |
| Whitefish, DENISON TP., ALG. | | | |
| Brick-yard at,..... | 57 B | xv | |
| Farm land near,..... | 106 C | xiv | |
| Quartz from near, assay | 92 | i | |
| bay, L. OF THE WOODS. | | | |
| Floating island in,..... | 109 | vi | |
| Geology of | 102 | vi | |
| Gold mining on, 1897,..... | 13, 45 | vii | |
| | 1898,..... | 276 | viii |
| <i>See also</i> Regina mine. | | | |
| prospecting near, 1900 | 146 | x | |
| Keewatin schist on, photos | 80 | vi | |
| Minor refs. to,..... | 181 | v | |
| | 90 | vi | |
| Notes on | 110 | v | |
| | 100 | vi | |
| | 119 | vii | |
| Pine east of,..... | 185 | v | |
| Whitefish lake, BROUGHAM TP., RENFREW CO. | | | |
| Graphite on. <i>See</i> Black Donald mine. | | | |
| Suggested alteration of name ... | 53 A | xiii | |
| lake, INDIAN RESERVE, SUD-BURY DIST. | | | |
| Nickel found near, 1856,..... | 235 | xii | |
| lake, L. OF THE WOODS, R.R.D. | | | |
| Rocks on,..... | 90 | vi | |

| | Page. | Vol. | | Page. | Vol. |
|--|---------------|--------|--|------------|--------|
| Whitefish lake, MICHIGOTEN RIVER, | | | Whiting, Samuel | | |
| ALG. | | | Gold mining by, R. R. d..... | 232 | ii |
| Description of..... | 190 | vii | | 179 | vii |
| Glaciation from, to Michipicoten | | | <i>See also</i> Kendall and Whiting. | | |
| harbour..... | 204 | vii | (chalk). | | |
| Minor ref. to..... | 175 | A xv | Canadian production of, 1886-87. | 243 | R C |
| Rocks on..... | 189 | vii | lake, W. OF MINNITAKI LAKE, | | |
| lake, NEAR WHISKEY LAKE, | | | R. R. d. | | |
| ALG. | | | Character of country near..... | 176 | viii |
| Copper mining on..... | 67 | A xiv | Clay area north of..... | 182 | vii |
| | 70 | A xv | Gold mining on..... | 179 | vii |
| lake, PIGEON RIVER DIST., | | | Rocks on..... | 170 | vii |
| TH. B. D. | | | Whitman and Brinton. | | |
| Govt. road to, from Oliver tp.... | 9 | vi | Log of well sunk for, Bothwell | | |
| Rocks on and near..... | 143, 144, 147 | A xvi | field..... | 22 | vi |
| Silver on, mining..... | 202 | R C | Oil producing..... | 24 | vi |
| origin..... | 36 | R C | Whitman tp., ALG. | | |
| rapid, L. OF THE WOODS, | | | Notes on country north of... 197, 198 | | viii |
| Photo of..... | 80, 81 | xii | Whitney, D. J. | | |
| river, L. HURON, | | | Talc mining by, near Actinolite. | | |
| Cobalt at mouth of..... | 60 | B xiv | | 92, 99-101 | iii |
| Copper mining in. <i>See</i> Wallace | | | E. J. | | |
| mine. | | | Evidence by, before R. C. re:— | | |
| Minor ref. to..... | 202 | v | free trade..... | 235 | R C |
| Nickel near mouth of..... | 24 | R C | marble..... | 80 | R C |
| river, THUNDER BAY, L. SU- | | | | 62, 63 | B xiii |
| PERIOR. | | | H. B. | 89 | A xv |
| Agricultural land along..... | 206 | R C | Isaac | 192, 193 | xi |
| Animikie formation N. of..... | 32 | R C | tp., ALG. | | |
| Whitegravel river, L. SUPERIOR, | | | Physical features of..... | 106 | A xiii |
| TH. B. D. | | | Soil from, description..... | 131, 132 | A xiii |
| Description of lake shore near... 135 | | viii | Trees in..... | 123 | A xiii |
| Whitehead, A. B. | 45 | vii | Whitson, J. F. | | |
| Whiteley, Arthur W. B. | | | Letter to, re naming of Fort | | |
| Manager, Ferguson gold mine, 80, | 260 | vi | Frances..... | 40 | iv |
| Little American mine.. | 63 | v | Ref. to surveys by, Rainy Lake | | |
| Mayflower mine.. | 84, 85 | x | dist..... | 165 | v |
| Mining by, Seine River dist..... | 67 | v | Sudbury dist. | | |
| White-pine narrows, LAC SEUL. | | | 156, 158, 187, | 201 | x |
| Pines on..... | 61 | v | creek, VERMILION RIVER, NIP. | | |
| Whitesand river, L. SUPERIOR, | | | Rocks on..... | 45 | iii |
| TH. B. D. | | | slate..... | 207 | A xiii |
| Zinc on..... | 209 | ix | lake, BLEZARD TP., NIP. | | |
| mining, road required for.. | 177 | i | Rocks on and near 6, 14, 56, 62 | | c xiv |
| <i>See also</i> Zenith mine. | | | analyses..... | 208 | A xiii |
| Whitewash. | | | conglomerate..... | 94 | C xiv |
| Lime for making..... | 14 | E xiii | granite..... | 83 | C xiv |
| Whitewater, Wis. | | | greenstone..... | 75 | i |
| Peat milling experiments at..... | 223 | xii | nickel-bearing, analyses.. | 212 | A xiii |
| | 28 | A xiii | norite..... | 109 | C xiv |
| Whitewater lake, RAYSIDE AND | | | section..... | 204 | A xiii |
| SNIDER TWP., NIP. | | | tuff, analysis..... | 132 | C xiv |
| Rocks on and near:— | | | Whittington, George | | |
| conglomerate, character. | | | Brick-yard at, Napanee..... | 77 | B xv |
| | 94, 131 | C xiv | Warton, ANABEL TP., BRUCE CO. | | |
| nickel-bearing eruptive. | | | Cement works near..... | 34 | xii |
| | 204, 205 | A xiii | | 139 | A xiv |
| | 13 | C xiv | proposed..... | 19 | B xiii |
| notes by Coleman..... | 38, 39 | C xiv | <i>See also</i> Colonial Portland Cement | | |
| tuffs..... | 6 | C xiv | Co. | | |
| Lily pond, MICHIGOTEN DIV., | | | Wichniowaia mts., NOVGOROD | | |
| ALG. | | | PROV., RUSSIA..... | 213 | vii |
| Iron formation on..... | 315, 330, 344 | A xiv | Wick, H. | 105 | viii |
| peat press. | | | Wickett—? | 80 | B xiii |
| Notes on..... | 28 | A xiii | Wicklow co., IRELAND. | | |
| Whiting, J. L. | 178 | iii | Pyrites deposits in..... | 192 | A xvi |
| J. S. | | | tp., HASTINGS CO. | | |
| Acknowledgments to..... | 105 | v | Corundum in, probability of.... | 224 | vii |
| Work by, 1895..... | 49 | v | | | |

| | Page. | Vol. |
|---|----------------------|--------|
| Widdifield (LATE LAMONT), WIDDI-FIELD TP., NIP. | | |
| Saugen clay at..... | 21 | B xv |
| tp., NIP. | | |
| Brick-clay in. <i>See also</i> North Bay. | | |
| Wiegand, Richard | | |
| <i>See also</i> Wiegand gold mine. | | |
| Gold prospecting by, Seine River dist. | 81 | vi |
| Work by, 1899..... | 71 | vi |
| Thomas | | |
| <i>See also</i> Wiegand gold mine. | | |
| Foley gold mine found by ... | 227, 230 | iv |
| William <i>See</i> Wiegand gold mine. | | |
| (P. O.), SEINE RIVER DIST., R. R. D. | 157 | v |
| gold mine , SHOAL LAKE, SEINE RIVER, R. R. D. | | |
| Notes on, 1894..... | 25, 55, 56 | iv |
| 1895. | 65, 66, 157-159, 266 | v |
| 1897..... | 75 | vii |
| Quartz of, character..... | 36 | iv |
| Rocks of..... | 89 | iv |
| Gold Mining Co. | | |
| Work by, 1895..... | 157-159 | v |
| pt., SHOAL LAKE, SEINE RIVER, R. R. D. | | |
| Conglomerate at..... | 97 | v |
| Wieliczka , GALICIA, AUSTRIA. | | |
| Salt beds of..... | 178 | i |
| Wigan , LANCASHIRE, ENGLAND. | | |
| Mining and technical school of. | 493, 494 | R C |
| Coal and Iron Co. | | |
| Saniter process employed at.... | 93, 94 | ii |
| Wiggin, Henry & Co. | 184 | iv |
| | 178 | C xiv |
| Wight, J. .. | 106 | vii |
| | 105 | viii |
| | 118 | ix |
| Wigle, Angus | 117 | i |
| J. | | |
| Brick-yard of, Leamington..... | 64 | B xv |
| Wesley | 117 | i |
| Wigwam . | | |
| Black river, photo..... | 128, 129 | A xiii |
| lake, VERMILION RIVER, NIP. | | |
| Gold reported on..... | 155 | x |
| Wilberforce , MONMOUTH TP., HALI-BURTON CO. | | |
| Mica at..... | 203 | ix |
| Nepheline-syenite near..... | 216 | viii |
| tp., RENFREW CO. | | |
| Marl in..... | 121 | A xiv |
| Wilborg, J. | 341 | xii |
| Wilbur iron mine , PALMERSTON TP., FRONTENAC CO. | | |
| Exhibits of, at Buffalo..... | 86 | xi |
| Chicago..... | 78, 80 | ii |
| Notes on, 1899..... | 101, 105 | ix |
| 1900..... | 127, 128 | x |
| 1901..... | 259, 260 | xi |
| Notes on, by Folger..... | 135 | R C |
| Merritt..... | 129 | R C |
| Photo of..... | 289, 290 | xi |
| Production of..... | 136 | R C |
| | 59 | ii |
| Section of formation in..... | 129 | R C |

| | Page. | Vol. |
|--|-----------|--------|
| Wilbur Mfg. and Mfg. Co. | | |
| Capital and date of charter..... | 13 | vii |
| Wilcox, C. S. | 15 | ix |
| N. B..... | 99 | viii |
| Thomas | | |
| Iron claim of, Cowper tp. | 274 | v |
| <i>See also</i> next ref. | | |
| copper mine , COWPER TP. | | |
| <i>See</i> Beatty and Wilcox mine. | | |
| island , PARRY SOUND. | | |
| Copper mining on..... | 121 | x |
| | 116 | xii |
| Wildcat (MINING). | | |
| Definition of..... | 121 | i |
| Wild Potato lake , SEINE RIVER DIST., R. R. D. | | |
| Bedded veins N. of, sketch..... | 51 | iv |
| Gold mining on and near..... | 57 | iv |
| | 81 | viii |
| notes by Coleman. | 66, 67 | v |
| <i>See also</i> Alice A. mine. | | |
| Log Cabin mine. | | |
| Poreupine on..... | 154 | v |
| Rocks on and near..... | 153 | v |
| | 129, 130 | vii |
| Surveys on, ref. to..... | 40 | iv |
| Wilde, J. A. | 118 | ix |
| | 144 | x |
| | 75 | xi |
| | 67 | xii |
| station , DEROCHE TP., ALG. | | |
| Iron mining near. <i>See</i> Breitung Iron Co. and William mine. | | |
| Kiln plant at..... | 23 | xii |
| Wilder lake , GREY CO. | | |
| Marl in..... | 32 | xi |
| | 32 | xii |
| | 151 | A xiv |
| Wile, M. | 95 | ix |
| Wiley, Andrew Mark | | |
| <i>See also</i> Wiley and Co. | | |
| Director, Consolidated Mines Co. | 257 | xi |
| | 72 | A xiii |
| Iron mining by, Atikokan range. | 76 | ii |
| Pic river..... | 87 | ix |
| | 112 | x |
| Licence to..... | 144 | x |
| Notes by, on McKellar iron mine. | | |
| | 111, 112 | x |
| Part owner, Badger silver mine.. | 83 | vii |
| Treasurer, Consolidated Mines Co. | 19 | xi |
| F. S. | | |
| Licence to..... | 118 | ix |
| | 144 | x |
| Manager, Sawhill gold mine | 4 Bull. i | |
| | 76, 77 | vi |
| | 64 | vii |
| Part owner, Harold Lake gold mine..... | 4 Bull. i | |
| | 67 | vii |
| Silver mining by, Silver mt., 1897..... | 97 | viii |
| Harold, A. | | |
| <i>See also</i> Wiley Bros. | | |
| Analysis by, of iron ore near Black Sturgeon lake..... | 313 | xii |
| Iron ore exhibited by, at Chicago..... | 79, 82 | ii |

| | Page. | Vol. | | Page. | Vol. |
|---|---------------|--------|--|----------|--------|
| Wiley, Harold A.—<i>Con.</i> | | | Williams, Prof. George H. | | |
| Licence to..... | 148 | ix | Description by, of rocks from | | |
| ..... | 144 | x | Sudbury dist:— | | |
| Manager, Hawk Bay mine..... | 132 | vii | arkose..... | 150 | vii |
| Notes by, on Atikokan iron | | | auriferous..... | 92 | i |
| range..... | 72 | ii | breccia..... | 85 | i |
| Ref. to surveys by, Atikokan | | | diorite..... | 77, 78 | ii |
| river..... | 142 | v | Onaping tuff..... | 131 | c xiv |
| Silver mining by, Silver mt., | | | References to studies by, of Sud- | | |
| 1897..... | 97 | viii | bury rocks..... | 84 | i |
| Wiley Bros. & Marks. |  |  | ..... | 149 | vii |
| Acknowledgments to..... | 48 | v | ..... | 206 | x |
| Boring plant purchased by..... | 42 | A xiii | ..... | 290, 291 | xii |
| Exhibit of, at Pan-American |  |  | ..... | 107 | c xiv |
| Exhibition..... | 86 | xi | References to surveys by, Mar- | | |
| Gold mining by, Harold lake ... | 58 | iv | quette dist..... | 270 | A xiv |
| ..... | 69, 146 | v | Views of, <i>re</i> rocks, Wanapitei dist. | 127 | c xiv |
| Sawbill lake ... | 70 | v | Greville | 144 | iv |
| Iron mining by, Atikokan range. | 75 | iv | H. J. Carnegie | 12, 68 | A xv |
| ..... | 133, 266 | xi | ..... | 72 | A xvi |
| Loon Lake re- | | | J. D. | 106 | vii |
| gion ... 29-31, 254 | A xiv | | J. F. | | |
| ..... | 156, 167, 168 | A xv | Analysis by, of tinguaita..... | 189 | ix |
| Marl quarrying by, Thunder bay, | 179 | A xv | J. S. | | |
| bay and pt., L. of the Woods, | | | Notes by, on Michipicoten mines. | 103 | R C |
| R. R. D..... | 186 | v | Jabez B. (H. B. C.) | | |
| Wilfing, F. J. | 106 | vii | Acknowledgments to..... | 48 | v |
| ..... | 105 | viii | Agent at Lac Seul..... | 61 | v |
| ..... | 118 | ix | Michipicoten..... | 100 | viii |
| Wilke, William | | | Aluminium sulphate reported by, | | |
| Notes by, on manufacture of sul- | | | Lac Seul..... | 180 | vii |
| phuric acid..... | 196 | A xvi | Gold found by, near Lac Seul.... | 62 | v |
| Wilkens, H. A. J. | 340 | xii | Licence to..... | 105 | viii |
| Wilkie, John | 55, 57 | xi | Notes by, <i>re</i> naming of Fort | | |
| Wilkinson, E. R. | 292 | xi | Frances..... | 41 | iv |
| Henry | 252 | iv | John P. | | |
| ..... | 282 | v | Manager, Indian Joe mine..... | 94 | xii |
| Lieut. Gen. Henry C. |  |  | ..... | 62 | A xiii |
| Asbestos claim taken up by, L. | | | Ledyard gold mine... .. | 234 | iv |
| of the Woods..... | 114 | vii | Sawbill mill..... | 42, 88 | viii |
| Director, Black Eagle G. Mg. Co. | 254 | xi | ..... | 78 | ix |
| ..... | 58 | A xv | Ursa Major mine..... | 84 | ix |
| Regina Gold Mines... .. | 173 | v | ..... | 85, 86 | x |
| ..... | 53, 92, | vi | Silver mining by, near Queens- | | |
| ..... | 73 | x | boro..... | 91 | A xvi |
| Dr. S. | 94 | viii | Joseph | | |
| Willemite. | | | Salt well of, Port Franks..... | 55, 190 | R C |
| Definition of..... | 210 | vi | Views of, on taxed fuel..... | 236 | R C |
| Willetsholme, PITTSBURG TP., FRON- | | | Richard Harris | | |
| TENAC CO. | | | Evidence by, <i>re</i> royalties, Corn- | | |
| Granite quarrying at..... | 297 | xi | wall, Eng..... | 31, 32 | i |
| "William Whyte," s.s. | 121, 126 | vii | Thomas | | |
| William ? | | | Captain, Gertrude mine..... | 123 | xii |
| Peat process of..... | 193 | i | Helen mine..... | 155 | ix |
| Albert |  |  | ..... | 113, 191 | x |
| Notes by, on Houghton mining | | | Josephine mine..... | 71 | xi |
| school..... | 508 | R C | Z. J. S. | 226 | iv |
| B. | | | Bros. and Grey. | 220 | iv |
| Manager, Amy & Folger mica | | | Copper Mg. Co. | | |
| mine..... | 250 | ii | Capital and date of charter..... | 31 | A xvi |
| <i>See also</i> Black Bay iron mine. | | | gold mine, MARMORA TP., | | |
| Charles C. | 74 | xiii | HASTINGS CO. | | |
| ..... | 59 | A xiv | Mispickel in ores of..... | 110 | R C |
| ..... | 71 | A xv | iron mine, BAGOT TP. See | | |
| David | | | Black Bay mine. | | |
| Minor ref. to..... | 66 | ii | | | |
| Notes by, on iron deposits W. of | | | | | |
| Port Arthur..... | 67 | ii | | | |

| | Page. | Vol. |
|--|--------------|------|
| Williams iron mine, NEAR WILDE STA., ALG. | | |
| Notes on, 1903..... | 74, 75 A | xiii |
| 1904..... | 12, 44, 59 A | xiv |
| 1905..... | 14, 71, 72 A | xv |
| Photo of..... | 80, 81 A | xiii |
| Iron Mines Co. | | |
| Capital and date of charter..... | 37 A | xiii |
| Work by, Loon lake..... | 74 A | xiii |
| | 71 A | xv |
| lake, HOLLAND TP., GREY CO. | | |
| Marl from..... | 32 R C | |
| | 32 | xii |
| | 18 B | xiii |
| | 146 A | xiv |
| analysis..... | 108 | ix |
| Williamsburg, STANLEY TP., YORK CO. | | |
| Gravel pit near..... | 220 | x |
| tp., DUNDAS CO. | | |
| Limestone in, black..... | 39 B | xiii |
| quarries..... | 40 B | xiii |
| <i>See also</i> Groutley. | | |
| Williamson, E. D. | 49 | vi |
| S. H. | 69 A | xiii |
| S. H. | | |
| Gold mining by, near Minnitaki lake..... | 23 | viii |
| Marks Mines. | | |
| Capital and date of charter..... | 31 A | xvi |
| Willmott, W. C. | | |
| List by, of minerals found in Upper Laurentian..... | 11 R C | |
| Williston, Horace | 98 | ix |
| Willmott, Arthur B. | | |
| Acknowledgments to..... | 181 | x |
| | 128 | xi |
| | 299 A | xiv |
| | 175 A | xv |
| | 105 A | xvi |
| Analysis by, of ore, Strathcona nickel mine..... | 67 C | xiv |
| Assays of Sudbury ores sampled by..... | 199 A | xiii |
| Beaches on L. Superior measured by..... | 154 | viii |
| | 176 | ix |
| Conglomerate traced by, near Little Gros Cap..... | 183 | ix |
| Description by, of Agawa river.. | 131 | viii |
| Iron prospecting by, Timagami dist..... | 88 A | xv |
| Jasper conglomerate found by, N. of Echo lake, Alg..... | 124 | viii |
| Licence to..... | 144 | x |
| | 75 | xi |
| | 67 | xii |
| Mine manager for Algoma Commercial Co..... | 62 | xii |
| Notes by, on :— | | |
| Batchawana bay and Carp river..... | 127, 128 | viii |
| Dog and White rivers..... | 134-141 | viii |
| Paper by, on Mineral Industries of Sault Ste. Marie..... | 91-100 | xi |

| | | | |
|---|--------------------|--------|------|
| Willmott, Arthur B. —Con. | | | |
| Reports by, on :— | | | |
| Gold region of W. Ontario..... | 109-144 | vii | |
| Michipicoten iron range..... | 254-258 | viii | |
| | 152-185 | xi | |
| mining div..... | Bull. iii | | |
| | 181-206 | vii | |
| | 144-146 | viii | |
| Superintendent at Sault Ste. Marie..... | 7 | xi | |
| Surveys by, Michipicoten div., ref. to..... | 165, 166 | viii | |
| | 160, 161 | ix | |
| | 195, 196, 200, 201 | x | |
| | 300 A | xiv | |
| | 15 A | xv | |
| Nipigon Lake dist., ref. to..... | 127 A | xvi | |
| Work by, 1896..... | 71, 102, 104 | vi | |
| | 1897..... | 79, 80 | vii |
| | 1898..... | 120 | viii |
| | 1899..... | 143 | ix |
| Willoughby, George tp., WELLAND CO. | 76 | vi | |
| Gas well in..... | 20 | x | |
| | 102 A | xiv | |
| log..... | 113, 114 A | xv | |
| Willow. | | | |
| Abitibi dist..... | 193 | viii | |
| | 126 A | xiii | |
| injured by willow-gall..... | 129 A | xiii | |
| James Bay shores..... | 130 | iv | |
| Kenogami lake, Blanche river.. | 177 | xii | |
| Mattagami valley..... | 129 | v | |
| Michipicoten div..... | 195 | vii | |
| | 296 A | xiv | |
| Oba lake, near..... | 198 | vii | |
| Seine river..... | 74 | vi | |
| Shebandowan Lake region..... | 128 | v | |
| black | | | |
| Abitibi Lake reg..... | 241, 242 A | xiv | |
| gall pine-cone | | | |
| Abitibi Lake reg..... | 129 A | xiii | |
| herb. | | | |
| Night-hawk lake..... | 123 A | xiii | |
| Creek Gold Mg. and Development Co. | | | |
| Capital and date of charter..... | 13 | vii | |
| Wills, J. Lainson | | | |
| Notes by, on name "asbestos" .. | 95 | iii | |
| Willson, Hon. John | 140 | iv | |
| Thomas Leopold | | | |
| <i>See also</i> Ottawa Carbide Co. | | | |
| Willson Carbide Co. | | | |
| Acetylene gas discovered by..... | 32 | v | |
| | 27 | vi | |
| | 36 | xi | |
| Biographical sketch of..... | 140 | iv | |
| Licence to..... | 106 | vii | |
| Notes on invention of..... | 138-40 | v | |
| | 19 | vii | |
| Paper by, (and Suckert) on acetylene gas commercially considered..... | 152-166 | iv | |
| Shareholder, Willson Carbide Co..... | 22 | x | |
| Vice-President, Ottawa Carbide Co..... | 21 | x | |
| Thomas Whitehead | 140 | iv | |

| | Page. | Vol. | | Page. | Vol. |
|--|-----------|------|--|------------|------|
| Willson Aluminium Co. | | | Wimor gold mine, NEAR KENORA, | | |
| Plant of, at Spray, U. S. | 159 | iv | R. R. D. | 37 | ix |
| Carbide Co. | | | Notes on..... | | |
| Notes on, 1895..... | 37-39 | v | Winchell, Prof. Alex. | | |
| 1896..... | 32 | vi | Acknowledgments to..... | 143 | ix |
| 1897..... | 20, 22 | vii | Geological formations of Essex co. | | |
| 1898..... | 17 | viii | given by..... | 123 | xi |
| 1900..... | 22 | x | Horace V. | | |
| Producing, 1901..... | 36, 296 A | xi | Interested in Thunder Bay silver | | |
| 1902..... | 36 A | xii | mine..... | 229 | i |
| 1903..... | 18 A | xiii | Jasper pebbles found by, Shoal | | |
| 1904..... | 18, 88 A | xiv | lake..... | 97 | v |
| 1905..... | 23, 107 A | xv | Notes by, on Little American | | |
| Wilmot, Charles W. | 108 | R C | mine..... | 54 | iv |
| Wilson, Dr. A. J. | | | Minnesota royal- | | |
| Notes by, on iron ores near Black | | | ties..... | 226 | ii |
| Sturgeon lake..... | 311 | xii | veins of Rainy | | |
| Ref. to surveys by, Abitibi dist. . | 110 A | xiii | Lake reg..... | 70 | iv |
| Alexander | 256, 257 | ii | Wiegand mine..... | 56, 57 | iv |
| Alexander | 153 | iii | Report by, on Foley gold mine.. | 228 | iv |
| H. M. | 53 A | xvi | Iron ores of Min- | | |
| Horace L. | | | nesota, ref. to.. | 153 | ix |
| Cobalt prospecting by, Bay lake. | 87 A | xv | 195, 199 | x | |
| Hugh (1848)..... | 173 | ii | Surveys by, N. of Great Lakes, | | |
| Hugh | | | ref to..... | 158 | viii |
| Ref. to map by, Silver islet..... | 133 | vi | Rainy Lake reg. | | |
| surveys by, E. of L. Superior. | 162 | ix | 42, 83, 89, 92, 93 | iv | |
| 190 | x | | 184 | ix | |
| Dr. James | | | Seine River dist. . | 67, 98 | v |
| Fossil tracks found by, Perth.... | 40 | R C | 151 | vii | |
| Wilonite named after..... | 188 | ii | Views of, <i>re</i> iron ores of Min- | | |
| 242 | viii | | nesota..... | 53 | ii |
| Peter | 256 | ii | 198 | x | |
| R. J. | | | N. H. | | |
| Brick-yard of, Ganonoque..... | 76 B | xv | Notes by, on Keewatin formation. | 158 A | xv |
| Robert | 31 | viii | Report by, on iron ores of Min- | | |
| 90 A | xv | | nesota, ref. to..... | 65-69 | ii |
| W. J. | | | 153 | ix | |
| Gold mining by, Michipicoten | | | 195, 199 | x | |
| div..... | 105 | viii | 159, 164 A | xv | |
| 118 | ix | | Surveys by, north of Great | | |
| 144 | x | | Lakes..... | 158 | viii |
| Mississagi river. 149 | viii | | Views of, <i>re</i> iron ores of Min- | | |
| W. J. (GEOL. SURV.) | | | nesota, ref. to..... | 53 | ii |
| Acknowledgments to..... | 215, 216 | x | Winchester, ILL. | | |
| Refs. to surveys by :— | | | Paving clay from, analysis..... | 120 | iii |
| Abitibi dist..... | 205-210 A | xiv | Winchester, WINCHESTER TP., DUN- | | |
| Blanche river..... | 174 | xii | DAS CO. | | |
| Kenogami Lake dist..... | 230 | xi | Limestone near..... | 40 B | xiii |
| Kwataboahagan river... 180, 181 A | xiii | | Cambro-Silurian..... | 46, 47 B | xiii |
| bend, MISSISSAGI RIVER, ALG. | 195 | viii | tp., DUNDAS CO. | | |
| iron mine, BAGOT TP. See Mar- | | | Limestone in, fossiliferous..... | 40 B | xiii |
| tel iron mine. | | | Winckel, Herbert Van | 52 A | xiii |
| iron mine, N. OF PALMER TP. | | | Wind. | | |
| <i>See</i> Vulcan iron mines. | | | Effect of, on artesian wells..... | 59 | i |
| landing, BLANCHE RIVER, NIP. | | | Windegoaquinzing (CANNIBAL) lake, | | |
| Description of river near..... | 173 | xii | S. W. OF MATTAGAMI LAKE, | | |
| tariff bill. | | | ALG..... | 130 | ix |
| Affecting nickel..... | 28 | vii | Windermere lake, ALG. | | |
| tp., P. S. D. | | | Notes on, by Charlton..... | 199 | viii |
| Copper and iron in. <i>See</i> Loring. | | | Windham Centre, WINDHAM TP., | | |
| Wilsonite. | | | NORFOLK CO. | | |
| Altered form of scapolite..... | 225 | vi | Limnolite in..... | 201 | ix |
| Apatite districts..... | 442 | R C | tp., NORFOLK CO. | | |
| Bathurst tp., analysis..... | 211 | ix | Limestone in..... | 88 B | xiii |
| Nomenclature..... | 188 | ii | Windigo Bones pt., IRON LAKE, | | |
| 242 | viii | | MICHIPICOTEN DIV., ALG. | | |
| Ottawa valley..... | 188 | ii | Iron formation at..... | 318, 319 A | xiv |

| | Page. | Vol. |
|---|-------------|------|
| Windigo mt., MICHIPICOTEN DIV., ALG. | | |
| Rocks near..... | 303 A | xiv |
| Windigokan lake, NIPIGON LAKE DIST., TH. B. D. | | |
| Iron locations near, notes.... | 143-145 A | xvi |
| ranges around, report by Moore..... | 136-148 A | xvi |
| Rocks on and near :— | | |
| classification..... | 139 A | xvi |
| iron formation..... | 126 A | xvi |
| Keewatin..... | 119 A | xvi |
| Topography of dist..... | 138 A | xvi |
| Windigoostigwan (CANNIBAL) lake, R. R. D. AND TH. B. D. | | |
| Minor ref. to..... | 136 | v |
| Notes on, by Blue..... | 137, 138 | v |
| Rocks on..... | 73 | v |
| | 131 | xi |
| Windigo-Weas lake, 'NEAR IRON LAKE, MICHIPICOTEN DIV., ALG. | | |
| Rocks on..... | 318 A | xiv |
| Window-glass. See Glass. | | |
| Windsor, W. SANDWICH TP., ESSEX CO. | | |
| Geological formations at..... | 123 | xi |
| Natural gas supply of..... | 29 | v |
| factories using..... | 19 | x |
| petition against export..... | 41, 44 | xi |
| shortage..... | 43 | xi |
| statistics..... | 42 | xi |
| Route from, to Fort William, notes by Blue..... | 107-112 | v |
| Salt in and near, boring for..... | 33 | vi |
| water..... | 59 | i |
| works..... | 23 A | xvi |
| Windsor, HANTS CO., N.S. | | |
| Notes on King's College at..... | 511 | R C |
| and Cobalt Mg. Co. | | |
| Capital and date of charter..... | 26 A | xv |
| Gas Co. | | |
| Capital and date of charter..... | 24 A | xiii |
| Salt Co. | | |
| Capital and date of charter..... | 10 | x |
| Operating, 1896..... | 33 | vi |
| 1899..... | 111 | ix |
| Tests by, on fuels..... | 19 | x |
| -Yukon Mg. Co. | | |
| Capital and date of charter..... | 10 | viii |
| Windy lake, CARTIER TP., ALG. | | |
| Rocks near..... | 197, 210 A | xiii |
| lake, CASCADEN AND DOWLING TPS., ALG. | | |
| Absence of gossan on..... | 16, 63 c | xiv |
| Geology of, notes by Coleman. | | |
| | 196, 197 A | xiii |
| Glaciation near..... | 102, 103 c | xiv |
| gravel plains..... | 106 c | xiv |
| Minor ref. to..... | 192 A | xiii |
| Rocks on and near..... | 84 | i |
| acid eruptive, notes and photo | | |
| | 6, 64, 65 c | xiv |
| conglomerate..... | 94, 131 c | xiv |
| diabase..... | 76 | i |
| gabbro..... | 294 | xii |
| greenstone..... | 75 | i |
| Laurentian..... | 10 c | xiv |

| | Page | Vol. |
|--|----------------------|------|
| Windy lake.—Con. | | |
| Rocks on and near.— <i>Con.</i> | | |
| nickel-eruptive, character..... | 276 | xii |
| and photo. | | |
| 208-210 A | xiii | |
| norite..... | 109 c | xiv |
| Section to, from Murray mine. With c | xiv | |
| ref. to..... | 8 c | xiv |
| Winger, WAINFLEET TP., WELLAND CO. | | |
| Natural gas in..... | 91 A | xiv |
| log of boring..... | 104 A | xiv |
| quarry, SPRINGVALE, HALDI- MAND CO. | | |
| | 56 B | xiii |
| Wingham, TURNBERRY TP., HURON CO. | | |
| Brick-yard in..... | 57, 71 B | xv |
| Onondaga formation at..... | 45 | R C |
| Salt at..... | 187, 188 | R C |
| depth and thickness..... | 181 | R C |
| Salt at, works..... | 22 A | xiii |
| | 20 A | xiv |
| | 23 A | xvi |
| See also Gray, Young, and Sparling. | | |
| Wink, Daniel..... | 207 | iv |
| | 69 | vi |
| Winning, Bush..... | 71 | ix |
| Winnipeg, MAN. | | |
| Country between, and Mattawa. | | |
| See Woodland div., C. P. R'y. | | |
| C. P. R'y. opened to, 1883..... | 171 | v |
| Consolidated gold mine, L. OF THE WOODS. | | |
| A melancholy ruin..... | 98 | vi |
| Notes on, by Blue..... | 20, 21 | iii |
| Merritt..... | 109 | R C |
| See also next ref. | | |
| Consolidated Gold Mg. Co. | | |
| Gold mining by, L. of the | | |
| Woods..... | 26, 64, 115-117, 446 | R C |
| | 233 | ii |
| lake, MAN. | | |
| Archaean rocks northward from. | 246 | v |
| Gneiss on..... | 10 | R C |
| river, MAN. | | |
| Waterpower on..... | 252 | vii |
| | 14 A | xv |
| | 226 | i |
| Winter, John S..... | | |
| Winterthur, SWITZERLAND. | | |
| School at, for foremen..... | 494 | R C |
| Wire. | | |
| Imports of, Canada, 1881-87..... | 254 | R C |
| Rope tramways, notes on..... | 351-353 | R C |
| Works for making, statistics, 1881..... | 116 | ii |
| Wirtanen, Isaac..... | 31 A | xv |
| Wisconsin, U.S. | | |
| Area of..... | 193 | v |
| Charcoal in, cost of..... | 341 | R C |
| Mining laws in..... | 13 | i |
| notes by R. C..... | 283 | R C |
| Diamonds in..... | 121-124 | ix |
| Iron ores of, production, 1887.... | 468 | R C |
| 1892-3..... | 146 | iii |
| cost..... | 10 | i |
| See also Penokee- Gogebic range. | | |

| | Page. | Vol. | | Page. | Vol. |
|---|--------------------|--------|---|----------|--------|
| Wisconsin.—<i>Con.</i> | | | Wolf.—<i>Con.</i> | | |
| Rocks in, Aninikie..... | 33 | R C | Michipicoten div..... | 200 | A xv |
| Huronian..... | 8 | R C | Batchawana river..... | 203 | viii |
| | 246 | v | Nipigon Lake dist..... | 139 | A xvi |
| University. | | | Timagami Lake dist..... | 58 | R C |
| Notes on, by Richards..... | 512 | R C | Dr. | | |
| Wiser & Son, J. P. | | | Alloys of nickel made by..... | 383 | R C |
| Brick-yard of, Prescott..... | 65 | B xv | | 165 | c xiv |
| analysis of clay for..... | 15 | B xv | lake, BEDFORD TP., FRONTENAC | | |
| Wisner, W. S. | | | CO | | |
| | 33 | xii | Apatite mining in..... | 230 | ii |
| | 18 | B xiii | Magnetic iron sand on..... | 48, 49 | ii |
| | 154 | A xiv | pt., L. OF THE WOODS..... | 186 | v |
| tp., NII. | | | river, L. SUPERIOR, TH. B. D. | | |
| Geology of..... | 202 | A xiii | Galena on..... | 38 | R C |
| Iron ore in..... | 201 | x | Zinc on..... | 15 | A xiv |
| | 16 | A xvi | sta., C. P. RY., TH. B. D. | | |
| Moraine in..... | 102 | C xiv | Lead mining near..... | 87 | A xiii |
| Rocks in..... | 274 | xii | Wolfe, Frederick..... | 164 | R C |
| | 71-73 | C xiv | creek, LOON LAKE, ADDINGTON | | |
| diabase..... | 203 | A xiii | CO. | | |
| petrography..... | 213 | A xiii | Rocks near mouth of..... | 201 | xi |
| Huronian..... | 127 | C xiv | island, L. ONTARIO. | | |
| iron-bearing, notes..... | 185, 186 | x | Limestone on, analysis..... | 44 | B xiii |
| nickel-bearing..... | 211 | A xiii | Cambro-Silurian..... | 43, 44 | B xiii |
| tuff..... | 132 | C xiv | Flint on..... | 198 | ix |
| Wissnan, M..... | 106 | vii | Wolff, Dr. J. E. | | |
| Witch bay, L. OF THE WOODS, R. R. D. | | | Notes by, on taconyte..... | 164 | A xv |
| Gold mining in, 1899..... | 44 | ix | Surveys by, Mesabi iron range, | | |
| 1902..... | 96 | xii | ref. to..... | 199 | x |
| Witch's cauldron, L. OF THE WOODS, | | | Lane & Co..... | 119 | ii |
| R. R. D..... | 169 | v | Wolford tp., GRENVILLE CO. | | |
| Wither's mine, THUNDER BAY, L. | | | Calcareous formation in..... | 47 | B xiii |
| SUPERIOR. | | | Wolframite. | | |
| Argentite in, analysis..... | 194 | ix | Couchiching lake..... | 194 | ii |
| Witherbees, F. S. | | | | 233 | vii |
| Analysis by, of iron ore concen- | | | | 212 | ix |
| trates..... | 350 | R C | Description of..... | 217 | vi |
| <i>See also next ref.</i> | | | Hardness and specific gravity of..... | 202 | vi |
| Sherman & Co. | | | Wollaston tp., HASTINGS CO. | | |
| Iron mines of, N. Y..... | 349 | R C | Chalcopryite in..... | 196 | ix |
| tests on ores from..... | 477 | R C | Iron ore in..... | 133 | R C |
| Witherite (BARIUM CARBONATE). | | | exhibited at Chicago, 78, 79, 82 | | ii |
| Composition of..... | 535 | R C | magnetite, analysis..... | 202 | ix |
| Description of..... | 222 | vi | mining. <i>See</i> Coe Hill. | | |
| Port Arthur silver dist..... | 57, 58 | B xiv | Mispickel in..... | 104, 198 | xi |
| Porcupine mine..... | 194 | ii | Pyrrhotite in..... | 207 | ix |
| | 212 | ix | | 200 | A xvi |
| Witherow, J. B. | | | Wollastonite (CALCIUM SILICATE). | | |
| Estimates by, of cost of iron | | | North Burgess tp..... | 194 | ii |
| smelting..... | 334, 335, 389, 394 | R C | | 212 | ix |
| | 112 | ii | Wolseley, Sir Garnet | | |
| Wittichen, GERMANY. | | | Description by, of storms in | | |
| Silver-cobalt ores at..... | 62 | B xiv | Shebandowan Lake dist..... | 120 | v |
| Witty, W..... | 32 | A xv | "Narrative of Red River Expedi- | | |
| WN 5 gold loc., RESERVE ISLAND, | | | "tion" by, ref. to..... | 135 | v |
| SEINE RIVER, R. R. D. | | | Notes by, on cannibalism among | | |
| Notes on, by Bow..... | 94, 95 | viii | Indians..... | 138 | v |
| Woehler, H. C..... | 106 | vii | Ref. to route taken by Red River | | |
| | 101 | viii | Expedition..... | 134 | v |
| Wohler, F..... | 142, 144, 153 | iv | Wolsey lake, M. NIPOULIN ISLAND. | | |
| Woidoma, RUSSIA. | | | Niagara formation at..... | 78 | B xiii |
| Peat manufactured at..... | 218 | ii | Wolst-Rees Cobalt Silver Mg. Co. | | |
| Wolcott, WAYNE CO., N. Y. | | | Capital and date of charter..... | 31 | A xvi |
| Iron smelting at, 1835..... | 323 | R C | Woman river, W. OF RICE LAKE, | | |
| Wolf. | | | ALG. | | |
| Abitibi dist..... | 127 | A xiii | Iron ore on..... | 317 | xii |
| Attracted by red deer..... | 97 | iv | | 15 | A xv |
| | | | character..... | 137 | xi |

| | Page. | Vol. | | Page. | Vol. |
|---|----------|--------|---|----------|--------|
| Woman river. — <i>Con.</i> | | | Woodside, J. H. | 107 | x |
| Jasper ore north of..... | 187-201 | x | John | 229 | i |
| Minor ref. to..... | 132 | ix | Woodslee, ROCHESTER TP., ESSEX CO. | | |
| Wonderland Silver Mg. Co. | | | Boring near, for oil | 111, 114 | A xv |
| Capital and date of charter..... | 31 | A xvi | Woodstock, E. OXFORD TP., OXFORD CO. | | |
| Wonderly Gold Mining Co. | | | Brick-yard at, description..... | 86 | B xv |
| Capital and date of charter | 9 | x | Court house of, building-stone of. | 99 | i |
| Wood. | | | Limestone near, Corniferous.... | 142 | xii |
| Analysis of..... | 166 | vi | 33, 91 | B xiii | |
| As a fuel..... | 200 | ii | fossiliferous. 148, 153 | | xii |
| Calorific power of..... | 186 | i | Woodward, Martin | | |
| 166 | vi | | Notes by, on oil industry at | | |
| 54 | B xv | | Petroleum..... | 156-158 | R c |
| Gasifying of..... | 481 | R c | Oil prospecting by..... | 19, 22 | vi |
| Products of carbonized..... | 482 | R c | W..... | 75 | xi |
| Scarcity of, increasing..... | 203 | ii | Woodwell & Co., Joseph | 118 | ii |
| <i>See also</i> Trees. | | | Woodworth, G. L. | 237 | i |
| alcohol. | | | 59 | ii | |
| As by-product of charcoal fur- | | | J. B. | 81, 86 | A xv |
| naces. 391, 481, 482 | R c | | Prof. | 242 | A xiii |
| peat..... | 210 | i | Woodyat tp., R. R. D. | 164, 167 | v |
| Made by Rathbun & Co..... | 88 | R c | Wool oil. | | |
| charcoal. | | | As by-product of petroleum. 158, 163 | | R c |
| Analyses of..... | | | Woolwich, KENT CO., ENGLAND. | | |
| <i>See also</i> charcoal..... | 166 | vi | Torsion tests at..... | 385 | R c |
| A. C..... | 38 | xi | tp., WATERLOO CO. | | |
| A. T..... | 46 | v | Brick-yard in. <i>See</i> Conestogo. | | |
| 15, 222 | ix | | Worcester co., MASS. | | |
| H. H..... | 66 | ix | Peat bogs in..... | 28 | A xiii |
| 94 | x | | free-school, MASS. | | |
| 242 | xi | | Notes on, by Mathers..... | 505 | R c |
| J. A..... | 73 | A xiv | Wordsworth. | | |
| S. C..... | 66 | ix | Quotations from..... | 2 | B xiii |
| W. H. | | | Workman, J. | | |
| Brick-yard of, Brockville | 77 | B xv | Brick making by, Brantford.... | 59 | B xv |
| William | 45 | A xv | J. K. | | |
| W. D. & Co..... | 370 | R c | Report by, on explorations in | | |
| Woodall, William | 491 | R c | McCaun tp..... | 248-253 | A xiv |
| Woodbridge, N. J. | | | World's Columbian Exposition. | | |
| Analysis of clay from..... | 120 | iii | Catalogue of iron exhibit at, | | |
| 160 | A xiii | | from Ont..... | 78-82 | ii |
| oil-well, COLCHESTER TP., | | | Ontario's exhibit at..... | 83, 88 | xi |
| ESSEX CO..... | 113, 114 | A xv | notes..... | 185-194 | ii |
| Woodburn, A. S., J., AND H. P. | 144 | x | Worms. | | |
| Woodbury, —? | 140 | C xiv | Abitibi dist..... | 129 | A xiii |
| Woodchuck gold mine, CLEARWATER | | | Worthington, C. P. | 118 | ix |
| BAY, L. OF THE WOODS. | | | 144 | x | |
| Notes on, by Bunting..... | 118 | R c | 75 | xi | |
| Woodhouse tp., NORFOLK CO. | | | 104 | ii | |
| Bituminous shales in. <i>See</i> Port | | | 186 | iii | |
| Dover. | | | Worthington, DRURY TP., ALG. | | |
| Limestone in, analysis..... | 88 | B xiii | Agricultural land near..... | 103 | C xiv |
| Corniferous | 118 | B xiii | clay plain, altitude..... | 103 | C xiv |
| Woodhus, A. | 114 | xii | Gold mining near. <i>See</i> Dwyer | | |
| Woodland div., C. P. R'y. | | | mine. | | |
| Description of, by C. P. R. en- | | | Nickel mining near. <i>See</i> Totten | | |
| gineers..... | 108-116 | iv | mine and Worthington mine. | | |
| Woodlawn, CLEARFIELD CO., PENN. | | | Rocks at and near..... | 127 | C xiv |
| Paving clay from, analysis..... | 120 | iii | <i>See also</i> Worthington mine. | | |
| Woodman, Frank | 43 | iii | nickel mine, DRURY TP., ALG. | | |
| Woodpecker. | | | Actinolite in..... | 292 | xii |
| Abitibi dist..... | 253 | A xiv | Arsenic production of..... | 28 | xi |
| downy | | | Folgerite from, analysis and des- | | |
| Abitibi dist..... | 126 | A xiii | cription..... | 167, 168 | ii |
| hairy | | | Galena in..... | 282 | xii |
| Abitibi dist | 126 | A xiii | Gersdorffite in..... | 19 | C xiv |
| piledated | | | Iron pyrites in..... | 16 | C xiv |
| Abitibi dist | 243 | A xiv | Marcasite in..... | 158, 159 | C xiv |
| Woods, Joseph <i>See</i> next ref. | | | | | |

| | Page | Vol. | | Page | Vol. |
|---|---------------|--------|--|----------|--------|
| Worthington nickel mine. — <i>Con.</i> | | | Wright, John K. | | |
| Minerals in..... | 31, 159 | c xiv | Evidence by, before R. C. re:— | | |
| new (?)..... | 192 | ii | gold mining, L. of the Woods. 116, 446 | RC | |
| Molybdenite in..... | 161 | c xiv | mining laws..... | 313 | RC |
| Nickel ore in..... | 90 | i | Gold prospecting by, L. of the | | |
| morenosite..... | 163 | c xiv | Woods..... | 21 | iii |
| necolite..... | 19 | c xiv | M. P. | | |
| percentage..... | 142 | c xiv | Acknowledgments to..... | 102, 103 | vi |
| Notes on, 1891..... | 231 | i | Gold prospecting by, L. of the | | |
| 1892..... | 248 | ii | Woods..... | 101, 102 | vi |
| 1893..... | 185, 186 | iii | Manager, Gold Mountain mine.. | 187 | v |
| 1894..... | 246 | iv | Part owner, Sullivan mine..... | 45 | vii |
| 1895..... | 273 | v | Trojan mine..... | 43 | vii |
| 1902..... | 58, 286, 287 | xii | S. B. | | |
| Pentlandite in..... | 206 | ix | Manager, Cobalt refining plant.. | 65 | A xv |
| ..... | 281 | xii | ..... | 65 | A xvi |
| 15, 16, 159 | c xiv | | Notes by, on Deloro gold mine.. | 103 | xi |
| Pyrrhotite crystal in..... | 280 | xii | ref. to..... | 32 | B xiv |
| Refining plant near..... | 144 | c xiv | ..... | 172 | C xiv |
| Rocks in and near..... | 143 | vii | Whitaker | | |
| gabbro..... | 272, 273, 295 | xii | and Davidson. | | |
| ..... | 8, 31 | c xiv | Oil producing, 1896..... | 24 | vi |
| gossan..... | 280 | xii | creek, BLANCHE RIVER, QUE. | | |
| greywacké..... | 88 | c xiv | Course of..... | 36 | B xiv |
| porite..... | 114 | c xiv | Minor ref. to..... | 215 | xi |
| offset-deposits..... | 25, 30, 50 | c xiv | Morainic deposits near..... | 214 | xi |
| slate..... | 93 | c xiv | plaster quarry, NEAR MECH- | | |
| Section of..... | 30 | c xiv | ANICVILLE, CARLTON CO., | 33, 37 | B xiii |
| and plan..... | 270, 271 | xii | silver mine, L. TIMISKAMING, | | |
| WR 5 nickel loc. See Ross nickel | | | QUE. | | |
| mine. | | | Ancient knowledge of..... | 10 | B xiv |
| 56-58 gold locs. See Big Six | | | Notes on, by Miller..... | 101 | A xiii |
| mine. |  |  | ..... | 24 | B xiv |
| 92 copper loc. See Reynold's | | | Ore of, character..... | 7 | A xvi |
| claim. | | | Rocks on and near..... | 86 | B xiii |
| 108, 121 iron locs., MORIN | | | Silver Mg. Co. | | |
| LAKE, ALG. | 224 | A xiii | Capital and date of charter..... | 31 | A xvi |
| 352 copper loc., WHITEFISH | | | Wrought iron. | | |
| LAKE, NEAR WHISKEY LAKE, | | | For furnaces..... | 377 | RC |
| ALG. | | | Wroxeter, HOWICK TP., HURON CO. | | |
| Chalcopyrite masses in..... | 70 | A xv | Boring at, for salt..... | 55 | RC |
| Wragge, E. | | | WS arsenic loc. See Little Dan | | |
| Table by, of trials of fuels in loco- | | | mine. | | |
| motives..... | 204, 205 | i | Wulfenite (LEAD MOLYBDATE). | | |
| Wright, A. A. | 237 | ii | Description of..... | 218 | vi |
| Prof. A. A. | 154, 155 | xii | Hardness and specific gravity of. | 202 | vi |
| ..... | 69, 70 | B xiii | Wurtemburg, GERMANY. | | |
| C. B. See Wright plaster | | | Moss litter made in..... | 212 | ii |
| quarry. | | | Tax in, on mineral industry..... | 297 | RC |
| C. H. C. | | | Wyandotte, WAYNE CO., MICH. | | |
| Minor ref. to..... | 215 | i | Iron works at..... | 479 | RC |
| Tests by, on mortars..... | 170 | A xiv | Refinery at..... | 142, 143 | vi |
| paving bricks..... | 129 | iii | Wyatt, Dr. Francis | | |
| Carroll D. | 84 | ii | Ref. to "Phosphates of America" | | |
| Charles | 26 | ix | by..... | 15 | i |
| David A. | 34 | xii | Statement by, re cost of calcium | | |
| ..... | 19 | B xiii | carbide..... | 165 | iv |
| ..... | 139 | A xiv | Wylde, E. C. | 178 | A xvi |
| E. | 51 | A xvi | Wylde, DEROCHE TP., ALG. | | |
| E. V. | | | Hematite near..... | 139 | xi |
| Evidence by, before R. C. re:— | | | Wylie, W. H. | | |
| iron, Timiskaming dist..... | 142 | RC | See also Wylie and Hall. | | |
| mica, Petawawa river..... | 151 | RC | Evidence by, before R. C. re:— | | |
| mining laws..... | 313 | RC | cost of charcoal iron..... | 393 | RC |
| Part owner, Gold Mountain mine. | | | ref. to..... | 333 | RC |
| ..... | 186, 187 | v | galena, Ramsay tp..... | 146 | RC |
| J. R. | 232 | ii | iron, Darling tp..... | 140, 141 | RC |
| James | | | marble, Darling tp..... | 83 | RC |
| Gypsum mining by, Brantford tp | 282 | v | mining laws..... | 316 | RC |
| | | | tariffs..... | 233 | RC |

| | Page. | Vol. | | Page. | Vol. |
|---|----------|------|--|-----------------|------|
| Wyllie, W. H. — <i>Con.</i> | | | X 830 iron locs., EAST OF L. NIPIGON, TH. B. D. | 123, 124, 132 A | xvi |
| Iron mining by; Darling tp. | 141 | R C | 857, 858 iron locs., STRAW-HAT LAKE, NEAR STEEP-ROCK LAKE, R.R.D. | | |
| Licence to | 106 | vii | Notes on, by Fraleck ... | 173, 175 A | xvi |
| ..... | 105 | xiii | Xenotime. | | |
| ..... | 118 | ix | Calvin tp. | 212 | ix |
| Mellwraith pyrites mine found by | 153 A | xvi | X-ray photos. | | |
| Manager for Corona Mg. Co. | 114 | ix | Of corundum grains | 216, 217 | viii |
| Hastings Gold Reduction Co. | 61 | iii | notes on | 240 | viii |
| Notes by, on a pyrites deposit, Darling tp. | 150 A | xvi | X. Y. Company. | | |
| and Hall. | | | Historical notes | 198 | v |
| Iron ore exhibited by, at Chicago. Report to, <i>re</i> iron in Lanark co. | 80 | ii | | | |
| ..... | 333, 334 | R C | Y 103 gold loc., MAC KAY PT., WAWA LAKE, ALG. | 114 | ix |
| Wyllie, Robert | | | 352 copper loc., NEAR WHITE-FISH LAKE, ALG. | 67 A | xiv |
| Brick-yard of, Owen Sound. | 66 B | xv | Y-One Mining Co. | | |
| Wyoming, U. S. | | | Capital and date of charter. | 13 | vii |
| Gypsum deposits in | 119 | R C | Y silver mine, PORT ARTHUR REG., TH. B. D. | 199 | R C |
| Mining laws of, notes by R. C. | 284 | R C | Yaack, L. | | |
| | | | Brick-yard of, Walkerton. | 60 B | xv |
| X 90 gold loc. See Black Jack mine. | | | Yale college. | | |
| 139, 212, 238 iron locs., ATKOKAN RIVER, R.R.D. | 142 | v | Notes on scientific school of. | 504, 505 | R C |
| 213 gold loc., SEINE BAY, RAINY LAKE, R.R.D. | | | Yamary, Joseph | 25 A | xiv |
| Notes on, by Coleman. | 74 | iv | Yankee Doodle Mg. Co. | | |
| Origin of ore in | 141 | xi | Capital and date of charter. | 13 | vii |
| 219 gold loc. See Harold Lake mine. | | | iron mine, S. CROSBY TP., LEEDS CO. | | |
| 277 gold loc., N. OF RESERVE ISLAND, SEINE RIVER, R.R.D. | 132 | vii | Ore of, percentage of iron in. | 45 | ii |
| 313, 314 gold locs. See Sawbill mine. | | | Yarker, E. CAMDEN TP., LENNOX CO. | | |
| 316-322, 337, 338 gold locs. See Hammond Reef mine. | | | Analysis of limestone from. | 27 B | xiii |
| 324 gold loc. See Hawk Bay mine. | | | Yarmouth tp., ELGIN CO. | | |
| 325 gold loc., JACK LAKE, R.R.D. | | | Artesian well in. See Union. | | |
| Notes on | 75 | vi | Brick clay and yards in. See Orwell and St. Thomas. | | |
| ..... | 132 | vii | Erie clay in. See Port Stanley. | | |
| ..... | 81 | ix | Yaunkin, F. | 106 | viii |
| 327, 328 gold locs. See New Golden Twins mine. |  |  | ..... | 108 | ix |
| 361 gold loc. See Wampum mine. |  |  | ..... | 144 | x |
| 361 (South $\frac{1}{2}$) gold loc. See Kabaskong mine. |  |  | ..... | 75 | xi |
| 401 gold loc. See Toronto and Western Mines Dev. Co. | | | Yellow copper ore. See Chalcopyrite. | | |
| 590-592 gold locs., NEAR MIDDLTON, TH. B. D. | | | falls, MATTAGAMI RIVER, ALG. | | |
| Notes on | 82 | vii | Description of river near. | 121, 129 A | xv |
| See also Leo Mg. and Dev. Co. | | | Photo of | 130 A | xv |
| 672, 673 gold locs., NEAR JACK-FISH, TH. B. D. | | | fever. | | |
| 682-685 gold locs., ISLAND FALLS, SEINE RIVER, R.R.D. | 82 | ix | Connexion of, with discovery of nickel-steel. | 168 C | xiv |
| 776 pyrites loc. See Otisse mine. | | | Jacket Gold Mg. Co. | | |
| 800-809 iron locs., PIC RIVER, L. SUPERIOR. | | | Capital and date of charter. | 13 | vii |
| Notes on, 1900 | 112 | x | ochre. | | |
| 826-829 iron locs., EAST OF L. NIPIGON, TH. B. D. | | | See also Ochre. | | |
| Notes on, by Bain | 212, 213 | x | Composition of | 463 | R C |
| Coleman | 124 A | xvi | sulphide of arsenic. See Orpiment. | | |
| | | | Yellowgirl bay, L. OF THE WOODS, R.R.D. | | |
| | | | Gold mining on. | 6 Bull. | i |
| | | | See also Homestake gold mine. | | |
| | | | Indian conjuring booths on, notes. | 80, 81 | vi |
| | | | photo. | 93 | vi |
| | | | Nomenclature of | 181 | v |
| | | | Yen, Charles. | 236 | v |
| | | | Yenite. See Hyante. | | |

| | Page. | Vol. | | Page. | Vol. |
|--|---------------|------|---|----------|------|
| Yeo island, THE THOUSAND ISLANDS. | | | Young Point, SMITH TP., PETERBORO' | | |
| Tourmaline on | 211 | ix | co. | | |
| Yeoman, T. H. | 234 | iv | Water-power at | 32 | xi |
| W. G. | 263 | v | 149 A | xiv | |
| Yeomans, Andy | 53, 57 | xi | process. | | |
| E. | 40, 41 A | xiii | For enriching gas | 147 | iv |
| Yerkes lake, HUTTON TP., NIP. | | | Young's Lake Mg. Co. | | |
| Iron ore near | 224 A | xiii | Capital and date of charter | 25 A | xiv |
| Yoke lake, MANITOU LAKE DIST. | | | Youngstown-Cobalt Silver Mg. Co. | | |
| R.R.D. | | | Capital and date of charter | 31 A | xvi |
| Rocks in, Keewatin | 50 | iv | Youngwood, PA | | |
| schists. | 62 | iv | Nickel refinery at | 131 | ii |
| Yonge tp., LEEDS CO. | | | Yssel river, HOLLAND. | | |
| Calcareous formation in | 72 B | xiii | Brick-kilns along, peat used in ... | 216 | ii |
| Clay flats in. See Mallory town. | | | Yte. | | |
| Marl in | 73 B | xiii | As a rock termination | 448 | R C |
| | 121 A | xiv | Yttrium. | | |
| York, SENECA TP., HALDIMAND CO | | | Lyndoch tp. | 236 | vii |
| Altitude of | 234 A | xiii | Yukon Nugget Gold Mg. and Ex- | | |
| Ballast pits at | 238 A | xiii | ploration Co. | | |
| Gypsum near | 53 B | xiii | Capital and date of charter | 13 | vii |
| See also Martindale mine. | | | Klondike Co-operative Mg. | | |
| Limestone at | 52 B | xiii | Co. | | |
| York, YORK CO. See Toronto. | | | Capital and date of charter | 10 | viii |
| Branch river, MADAWASKA | | | Mutual Mg. and Exploring | | |
| RIVER | | | Co. | | |
| Corundum on and near | 64, 65 | vi | Capital and date of charter | 13 | vii |
| | 219-221 | vii | river, YUKON. | | |
| | 20 | ix | Platinum on | 142 | vii |
| | 84 A | xvi | Yum-Yum gold mine, SHOAL LAKE, | | |
| exhibited at Buffalo | 87 | xi | L. OF THE WOODS. | | |
| mining. See Canada Corun- | | | Idle | 280 | viii |
| dum Co. | | | Notes on, 1897 | 49, 120 | vii |
| Explorations along: Murray's | | | 1898 | 276 | viii |
| map of | 217-222 | viii | 1899 | 58 | ix |
| Limestone from, analysis | 66 B | xiii | Photo of | 64 | vii |
| Photos of. | 232, 233 | viii | Gold Mining Co. | | |
| Syenite on | 216, 250 | viii | Capital and date of charter | 7 | vi |
| Waterpower on | 66 | vi | 13 | vii | |
| | 215, 220, 237 | viii | | | |
| co. | | | Zabriskie, William H. | 141 | vi |
| Brick making in, notes | 107-114 B | xv | Zadi lake, OPASATIKA RIVER, | | |
| Limestone in, notes by Miller .. | 126 B | xiii | ALG. | | |
| Peat in | 198, 209 | ii | Dimensions and depth of | 136 A | xiii |
| Estate quarry, CREDIT FORKS, | | | Remnant of a larger lake | 145 A | xiii |
| PEEL CO. | 98 | i | Zagloba claim, MICHIGICOTEN RIVER, | | |
| Factory, HUDSON BAY, KEE. | | | ALG. | | |
| Mission at | 192 | viii | Notes on, 1900 | 138, 139 | x |
| tp., YORK CO. | | | 1901 | 72, 73 | xi |
| Beach in | 229 A | xiii | Zanesville, OHIO. | | |
| Limestone in. See Don, and | | | Pressed-brick works at, notes ... | 101 | i |
| Weston. | | | Shales from, analysis | 119 | iii |
| Sewer-pipe works in. See Swan- | | | co. | | |
| sea. | | | Notes on, by Bawden | 133, 134 | R C |
| Tufa beds in | 126 B | xiii | <i>Zaphrentis.</i> | | |
| Yorke, Lionel | | | Jawbone creeks, Abitibi river ... | 182 | viii |
| Sandstone quarries of, Credit | | | " <i>gigantea.</i> | | |
| Forks | 74, 79 | R C | Abitibi river | 187 | viii |
| | 98 | i | Cayuga, N. tp. | 146 | xii |
| Yorkshire, ENGLAND. | | | Kwataboahagan river | 181 A | xiii |
| Coal in, royalty on | 22, 25 | i | Port Colborne (near) | 35 | xi |
| Youmans, Damon | 214 | v | Villanova | 143 | xii |
| Young, M. W. | | | Woodstock | 148 | xii |
| Prospecting by, Boston tp. | 54 A | xvi | " <i>mirabile.</i> | | |
| Peter | 227 | i | Cayuga, N. tp. | 146 | xii |
| lake, W. OF STURGEON LAKE. | | | Walpole and Townsend tps. | 143 | xii |
| TH.B.D. | | | | | |
| Minor ref. to | 147 | xi | | | |
| Schists on | 165 | vii | | | |

| | Page. | Vol. |
|--|--------------|------|
| <i>Zaphrentis prolifica</i> . | | |
| Abitibi river..... | 187 | viii |
| Anderdon tp..... | 125 | xi |
| Beachville, near..... | 148 | xii |
| | 92 B | xiii |
| Cayuga, N. tp. | 146 | xii |
| Hagersville..... | 145 | xii |
| Port Colborne (near)..... | 35 | xi |
| St. Marys..... | 152 | xii |
| | 96 B | xiii |
| Thedford..... | 154 | xii |
| | 8, 75 B | xv |
| Walpole and Townsend tps..... | 143, 144 | xii |
| " <i>schumannii</i> . | | |
| Rockford and Villanova..... | 143 | xii |
| Zavitz, Prof. | 44 A | xv |
| Zealand tp., R. R. D. | | |
| Iron in..... | 136 | xi |
| Rocks in, petrographical notes.. | 145 | xi |
| Zenith Gold Mfg. Co. | | |
| Capital and date of charter..... | 10 | viii |
| iron mine, ELY, MINN..... | 152 | ix |
| | 175 | xi |
| zinc mine, NEAR ROSSPORT, L. | | |
| SUPERIOR. | | |
| Minor refs. to..... | 30 | R C |
| | 209 | ix |
| Notes on, 1899..... | 86, 87 | ix |
| 1900..... | 110 | x |
| 1901..... | 298 | xi |
| 1902..... | 25 | xii |
| by Bell..... | 30 | R C |
| Production, 1901..... | 27 | xi |
| Zeolites. | | |
| Definition of..... | 545 | R C |
| Lake Superior..... | 37 | R C |
| | 212 | ix |
| Mamainse pen..... | 81 | iii |
| Mode of occurrence..... | 227 | vi |
| North Burgess tp., with apatite.. | 440 | R C |
| Ziegler, M. | | |
| Peat process of, notes..... | 2 A | xiii |
| Zimmerman, George | 131 | i |
| and Brown. See Brown and Zimmerman. | | |
| Zinc AND zinc-blende (SPHALERITE). | | |
| Annaberg, Saxony..... | 61 B | xiv |
| As an alloy of nickel..... | 160 | ii |
| Calumet island, Que..... | 87 | ix |
| Description of..... | 545 | R C |
| Determination of..... | 529 | R C |
| | 204, 210 | vi |
| Hardness of..... | 202 | vi |
| Joachimsthal, Bohemia..... | 61 B | xiv |
| Mining of, report for:— | | |
| 1898..... | 33 | viii |
| 1899..... | 36, 87 | ix |
| 1900..... | 110, 129 | x |
| 1901..... | 27, 298 | xi |
| 1902..... | 25, 139 | xii |
| 1903..... | 11, 94 A | xiii |
| 1904..... | 79 A | xiv |
| 1905..... | 91-94, 170 A | xv |
| 1906..... | 18 A | xvi |
| Ores of, notes by Goodwin..... | 210, 211 | vi |
| Occurrences of..... | 209 | ix |
| Prospecting for, hints on..... | 459 | R C |
| Specific gravity of..... | 202 | vi |

Zinc AND zinc-blende. —Cont.

| | Page. | Vol. |
|-----------------------------------|------------|------|
| Statistics, 1899..... | 13 | ix |
| 1900..... | 11, 12 | x |
| 1901..... | 13, 27 | xi |
| 1902..... | 12, 13, 25 | xii |
| 1903..... | 2 A | xiii |
| 1904..... | 1, 3, 15 A | xiv |
| 1905..... | 5 A | xv |
| 1906..... | 3-6, 18 A | xvi |
| Sulphur associated with..... | 22 A | xvi |
| Test for..... | 449 | R C |
| United States, production, 1888.. | 525 | R C |
| Wales, associated with gold.... | 45 | i |

||

| | | |
|------------------------------------|----------------|------|
| Abitibi lake..... | 442 | R C |
| | 219 A | xvi |
| Barrie tp..... | 203 | xi |
| | 77 A | xiv |
| Cobalt dist..... | xi, 101 A | xiii |
| Coleman tp..... | 12 B | xiv |
| Garden river..... | 30 | R C |
| See also Victoria mine. | | |
| Jackfish lake (Huronian m.).... | 62 | R C |
| | 77, 80 | v |
| Lady Evelyn lake..... | 25 B | xiv |
| Lake of the Woods, K. 157 island. | 104 | vi |
| Lake Superior:— | | |
| Caldwell pt..... | 149 | ix |
| Jackfish bay..... | 26, 62 | R C |
| Jarvis island..... | 198 | R C |
| McKellar island..... | 62 | R C |
| Silver islet..... | 86 | v |
| | 139 | vi |
| Lake tp. See Katherine m. | | |
| Marmora..... | 38 | iv |
| Olden tp., Long Lake P.O..... | 25 | xii |
| See also Richardson m. | | |
| Palmerston tp..... | 219 | v |
| Parry Sound, south of..... | 100 | iv |
| Port Arthur dist., silver ores.... | 38 | iv |
| | 54-58 B | xiv |
| | 61 A | xvi |
| Blende lake..... | 30 | R C |
| | 170 A | xv |
| Dorion tp..... | 37 | R C |
| | 59 A | xiii |
| evidence before R. C..... | 61-63, 199-203 | R C |
| notes by Merritt..... | 204 | R C |
| Three A mine..... | 28 | R C |
| Thunder bay..... | 177 | i |
| Sudbury dist..... | 91, 92 | i |
| | 95 C | xiv |
| Chelmsford, notes..... | 33 | viii |
| evidence before R. C..... | 59 | R C |
| Trout lake, Howell tp..... | 201 A | xiii |
| | 74, 121 C | xiv |
| Whitesand river..... | 30 | R C |
| | 177 | i |
| See also Gesic mine. | | |
| Zenith mine. | | |
| silicate. See Calamine. | | |
| spar. See Smithsonite | | |
| spinel. | | |
| Raglan tp..... | 237 | viii |
| white | | |
| Manufacture of..... | 463 | R C |
| United States, production, 1888.. | 525 | R C |

| | Page. | Vol. | | Page. | Vol. |
|------------------------------------|----------|------|--|-------|------|
| Zincite (RED ZINC ORE). | | | Zone Consolidated Oil Co. | | |
| Description of..... | 210 | vi | Capital and date of charter..... | 31 A | xvi |
| Hardness and specific gravity of. | 202 | vi | tp., KENT CO. | | |
| Zircon. | | | Oil in..... | 15 | viii |
| Associated with apatite..... | 442 | R C | <i>See also</i> Bothwell. | | |
| Bancroft, near, in syenite..... | 212 | ix | boring for..... | 5 | v |
| Canadian crystals of, the best.... | 9 B | xiv | 18-21 | | vi |
| Description of..... | 545 | R C | record..... | 109 A | xiv |
| Dungannon tp..... | 211 | vii | production, 1905..... | 92 A | xvi |
| Exhibit of, at World's Fair..... | 188 | ii | Zonochlorite. | | |
| Hardness of..... | 202 | vi | Nipigon bay..... | 194 | ii |
| Notes on, by Goodwin..... | 228 | vi | 212 | | ix |
| Pic island, L. Superior..... | 212 | ix | <i>Zonotrichia albicollis.</i> <i>See</i> Sparrow, | | |
| Renfrew co..... | 438 | R C | white-throated | | |
| Brudenell tp..... | 212 | ix | <i>Zonophyta.</i> | | |
| Sebastopol tp..... | 219 | vii | Anderdon tp..... | 124 | xi |
| 212 | | ix | Zueker=Levett Chemical Co. | 122 | xi |
| St. Lawrence river, Que..... | 214 | vii | Zug & Co. | | |
| Specific gravity of..... | 202 | vi | Iron output of, 1893..... | 119 | ii |
| Zirkel, F. | | | Labour employed by, statistics.. | 370 | R C |
| Analyses by, of anorthosites and | | | Zululand, S. AFRICA. | | |
| bytowntite..... | 226, 227 | viii | Mineral lands in, ownership of, | | |
| Zoccali, Guiseppe | 29 A | xv | (1890)..... | 43 | i |
| Zoisite. | | | Zwickau, SAXONY. | | |
| A secondary constituent in many | | | Mining school at..... | 496 | R C |
| rocks..... | 212 | ix | | | |

Appendix

Index of Part II., 16th Report Bureau of Mines, 1907, third edition.

(The Cobalt-Nickel Arsenides and Silver Deposits of Temiskaming).

| | PAGE. |
|--|-------------------|
| Abitibi branch | 136 |
| Acanthite | 158 |
| Accidents at Cobalt mines | 68 |
| Ages of rocks | 42, 47 |
| Ages, relative of minerals in veins | 10, 33, 158 |
| Amethyst | 158 |
| Agricultural area north of Cobalt | 34 |
| American Institute of Mining Engineers | 67 |
| Amphibolite | 120 |
| Amygdaloidal texture | 43 |
| Analyses:— | |
| Breccia | 58 |
| Bismuth, native | 9 |
| Calcite | 10 |
| Chloanthite | 8 |
| Clay | 35 |
| Cobalt Hill ore | 10 |
| Cobaltite | 9 |
| Cross Lake rocks | 64 |
| Dyscrasite | 10 |
| Exhibit collection | 13 |
| Limestone | 34 |
| Minerals | 7 |
| Missickel ore | 9 |
| Native bismuth | 9 |
| Niccolite | 8 |
| Ore from Rabbit Lake | 30 |
| Sample from Trethewey mine | 14 |
| Shipments | 15 |
| Silver-cobalt ore | 13 |
| Slate | 58 |
| Smaltite from Cobalt Hill | 11 |
| Smaltite from Gunnison Co., Col. | 166 |
| Tetrahedrite | 8 |
| White bloom | 7 |
| Ance à la Mine | 2, 6, 66 |
| Andesite | 166 |
| Andesites, Keewatin | 49 |
| Anglo-French Nickel Co., ore buyers | 24 |
| Anima-nipissing lake | 36, 138, 146 |
| Ores of | 67 |
| Animikie formation | 31 |
| Silver deposits in | 152 |
| Animikite | 152 |
| Annaberg, mineral deposits of, 44, 157, 158 | |
| Annabergite | 4, 6, 7, 155, 158 |
| Annabergite, white bloom | 7 |
| Annual average prices of silver | 24 |
| Anson-Cartwright, R. | 42 |
| Anticline | 11 |
| Anticlinals in Huronian | 46 |
| Anticlinal structure | 59 |

| | PAGE. |
|---|-------------------------|
| Antigorite | 163 |
| Antimonial silver | 4, 155 |
| Antimonide | 4, 155 |
| Antimony | 5 |
| Anvil lake | 36, 117, 125 |
| Ores of | 67 |
| Apatite | 1 |
| Aplite dikes | 65, 124, 165 |
| Appendix 1, II | 171, 182 |
| Aragonite | 158 |
| Archean formation, silver deposits in. See pre-Cambrian | 154, 155 |
| Archean protaxis | 1 |
| Argentite | 4, 6, 14, 151, 155, 158 |
| Argentopyrite | 158 |
| Argillite | 155 |
| Argyropyrite | 4 |
| Arkose | 43 |
| Arkose, in Casey | 133 |
| Arkose and granite, Ville Marie | 48 |
| Of Montreal river | 118 |
| Arsenates, list of | 4, 155, 158 |
| Arsenic mines. See Silver-cobalt mines, missickel mines | 32 |
| Arsenic, native | 5, 158 |
| Arsenic ore | 11, 13, etc. |
| Analyses of | 11, 13, etc. |
| At Rabbit Lake | 30 |
| Deposits of near lake Temagami | 9 |
| Exhibits of | 13 |
| In Joachimsthal deposits | 157, 158 |
| In Keewatin | 32 |
| In lake Superior silver deposits | 155 |
| Production of | 32 |
| Refining plants | 1, 32, 168, 170 |
| Value of | 32 |
| Arsenic, white | 32 |
| Uses of | 32 |
| Value of | 32 |
| Arsenical pyrites | 155, 158, 162 |
| Arsenides, list of | 4 |
| Arsenopyrite | 162 |
| Asbolite | 4, 158, 163 |
| Ash rocks | 49 |
| Atikokan iron range | 31 |
| Auld | 36 |
| Austria, cobalt deposits of | 157 |
| Auriferous arsenic ore | 1 |
| Average annual price of silver | 27 |
| Average value of ore shipped | 16, 17 |
| Azurite | 155 |
| Badger mine | 71 |
| Bad Vermilion lake | 157 |

| | PAGE. |
|--|------------------|
| Bailey mine | 20, 71 |
| Baker, M. B., on clay | 35 |
| On Keewatin | 45 |
| Balbach Smelting Co. | 21 |
| Baleo, Lower California, cobalt at | 166 |
| Banks township | 117 |
| Barber township | 36, 121 |
| Barite .....1, 125, 150, 155, 166, | 182 |
| Barium; carbonate of | 155 |
| Barlow, Dr. A. E. | 48, 139 |
| Report on Sudbury ore deposits, | |
| by | 8 |
| Basalt, later, Cross lake..... | 41, 44, 61 |
| Keewatin | 49 |
| Bass lake | 47 |
| Bay lake | 139 |
| Bear creek | 117, 129 |
| Beaver Consolidated mine | 71 |
| Beaver silver mine | 155 |
| Beaver lake | 122, 137 |
| Beaver mine | 71 |
| Bell, Dr. R. | 117 |
| Bergeron lake | 124 |
| Bessie lake | 127 |
| Big Dan mispickel mine | 9, 32 |
| Big Pete mine | 17, 71 |
| Bimbowrie, South Australia, cobalt | |
| deposits at | 165 |
| Birch lake | 129 |
| Bismuth | 4, 5, 9, 12 |
| In Annaberg deposits | 158 |
| In Joachimsthal deposits | 158 |
| Mining in Saxony | 182, 199 |
| Native, analysis of | 9 |
| Native, in Cobalt Hill vein | 4, 6, 14 |
| Native, in lake Superior silver | |
| deposits | 155 |
| Bismuthinite | 158 |
| Blair, W. J. | 145 |
| Blanche river | 36, 132 |
| Abitibi branch of | 136 |
| Limestone on | 34 |
| Blende | 4, 150, 151, 155 |
| Argentiferous | 151 |
| Bloom, cobalt and nickel | 4, 12 |
| Bloom, white | 4, 7, 12 |
| Bloom lake | 67, 124, 129 |
| Bloom lake area described | 129 |
| Blue color works | 158, 194 |
| Bohemia | 5, 157 |
| Bonanza | 153 |
| Bornite | 4, 124 |
| Boston township, rocks in | 37, 47 |
| Boulders, in conglomerate | 57 |
| In dikes | 48 |
| Silver in | 10 |
| Breccia | 11, 46, 49, 157 |
| Analysis of | 53 |
| Huronian | 49 |
| Middle Huronian | 56 |
| South of Lorrain | 149 |
| Breccia-conglomerate | 46, 49 |
| Brown-spar | 158 |
| Bucke, Township of | 29, 39, 44 |
| Keewatin contact in | 44 |
| Mine in | 32 |
| Bucknell property | 131 |

| | PAGE. |
|-------------------------------------|-------------------|
| Buffalo mine | 9, 15, 17 |
| Described | 68 |
| Building stone | 33 |
| Bulletin du Commerce, le, New | |
| Caledonia, on the cobalt indus- | |
| try | 166 |
| Buried iron range | 31 |
| Burrows, A. G., analyses by ... | 7, 58, etc. |
| On Lower Lorrain | 147 |
| Buyers of cobalt | 21, 185 |
| Cahill & Joudouin's camp | 129 |
| Calcite | 6, 155, 158 |
| From Violet mine | 10 |
| In Montreal river veins | 124 |
| White, in torsion cracks | 47 |
| Calspar | 154 |
| Canada, refineries in | 21 |
| Canadian Pacific Railway | 1 |
| Canadian Copper Co. | 18 |
| Canadian Mining Institute | 3, 25 |
| Capital stock of Cobalt companies | 19 |
| Carbon | 151 |
| Carbonate of barium | 155 |
| Carnegie, Pa., refinery at | 23 |
| Carter, W. E. H., notes on ores by | 13 |
| Cartwright, R. A., mapping by ... | 42 |
| Casey cobalt mine | 72 |
| Mountain | 121 |
| Township | 67, 132 |
| Described | 131 |
| Cerargyrite | 152, 155, 158 |
| Chalanches, ores of | 160 |
| Chalcedony | 158 |
| Chalcopyrite | 124, 155 |
| Chambers, W. C. | 144 |
| Character and strike of veins | 38 |
| Chemical groups | 5 |
| Chili, cobalt deposits of | 166 |
| Chloanthite | 4, 6, 10, 14, 158 |
| Analysis of | 8 |
| Chloride of silver | 158, 160 |
| Chlorite | 151 |
| Chown lake | 37, 43 |
| Christening of Cobalt town | 2 |
| Chrome-garnet | 156 |
| Chrome, N.J., refinery at | 23 |
| City of Cobalt mine | 20, 72 |
| Clay of cobalt area described | 34 |
| Analysis of | 35 |
| Clay belt | 35 |
| Clear lake, Keewatin at | 47 |
| Cobalt:— | |
| Cost of making color from ore... | 185 |
| Customs works in 1642 | 195 |
| Export tax on, about 1604 | 186 |
| Laws controlling trade of | 190 |
| Manufacture of in early times | 184 |
| Miners' grievances and regula- | |
| tions in 1617 | 188 |
| Mining in Saxony, present state | |
| of | 198, 199 |
| Mining office as protector of | |
| miners | 190 |
| Monopoly granted 1575 | 184 |
| Open dealing in | 191, 192 |
| Trade | 187 |
| Trade difficulties in early times | 185 |

| | PAGE. |
|---|--------------------|
| Works | 168, 169, 194, 195 |
| Works, local, in 1642 | 195 |
| Cobalt bloom | 4, 6, 155, 158 |
| In lake Superior silver deposits | 155 |
| Cobalt blue:— | |
| Invention of | 164, 167, 182 |
| Cobalt Central mine | 20, 77 |
| Cobalt Contact mine | 82 |
| Cobalt-glance | 162 |
| Cobalt Hill silver-cobalt mine | 10, 15 |
| Analysis of ore from | 11 |
| Description of | 10 |
| Native bismuth at | 12 |
| Cobalt industry | 166, 182 |
| Cobalt in pottery | 7 |
| Cobalt lake | 10 |
| Analysis of ore near | 12 |
| Dip of rocks at | 38 |
| Mine | 82 |
| Cobalt Lake mine, described | 82 |
| Cobalt mines. <i>See</i> Mines | 19, 68 |
| Dividends paid by | 19 |
| Cobalt ore:— | |
| Analyses of | 11, 13, etc. |
| Exhibit of | 13 |
| Foreign production of, 1896-1900 | 164 |
| In Austria | 157 |
| In Chili | 166 |
| In France | 160 |
| In Germany | 157 |
| In lake Superior silver deposits | 150 |
| In Mexico | 166 |
| In Norway | 162 |
| In New Caledonia | 162 |
| In New South Wales | 165 |
| In South Africa | 125, 165 |
| In South Australia | 165 |
| In United States | 165 |
| Occurrences of in Canada | 156 |
| Production of | 164 |
| Value of | 18, 164 |
| Cobalt oxide | 164 |
| Cobalt-silver area, metamorphism of | 41 |
| Cobalt-silver deposits:— | |
| Difference between and Port Arthur deposits | 150 |
| Origin of. <i>See</i> Origin | 59 |
| Resemblance of to Joachimsthal and Annaberg | 150 |
| Cobalt Silver Queen mine | 18, 82 |
| Cobalt-silver veins | 25 |
| Character and strike of | 38 |
| Dimensions of | 26 |
| Discovery of cobalt-silver ores | 1, 2 |
| Distribution of ores | 67, 117 |
| Distribution of veins | 67 |
| In diabase | 3 |
| In Keewatin | 3 |
| Ore in diabase | 3, 25, 28, 29, 124 |
| Origin of. <i>See</i> Origin | 59 |
| Cobalt Station | 2 |
| Town, christening of | 2 |
| Townsite mine | 84 |
| Cobalt, uses of | 7, 164 |
| Cobaltite | 4, 32, 147, 166 |
| Analysis of | 9 |
| Gold in | 32 |

| | PAGE. |
|---|-----------------------|
| Cobbing ore | 16 |
| Coins | 189 |
| Cole, A. A. | 20 |
| Coleman, Prof. A. P., report of on Sudbury ore deposits | 3 |
| Colonial mine | 20, 29, 84 |
| Colorado, Grant Co. | 165 |
| Columbus mine, cobaltite | 9, 79 |
| Columnar jointing | 39, 59 |
| Concentrators at Cobalt:— | |
| Buffalo | 70 |
| Cobalt Central | 77 |
| Coniagas | 75 |
| Muggley | 97 |
| Ore reduction | 105 |
| Conglomerate, pseudo of Keewatin | 46, 48 |
| And volcanic breccia | 46 |
| Of Casey township | 132 |
| Of Montreal river | 120 |
| Origin of | 42 |
| Veins, in | 3, 33 |
| Coniagas mine, described | 75 |
| Dip of rock at | 38 |
| Keewatin near | 50 |
| Strike of veins | 26 |
| Vein on | 26 |
| Contact: | |
| Diabase and Keewatin | 32, 33 |
| Diabase and Laurentian | 122 |
| Granite and Lower Huronian | 47, 121 |
| Keewatin and Huronian | 44 |
| Keewatin and Laurentian | 47 |
| Laurentian and Lower Huronian | 134 |
| Middle and Lower Huronian | 43, 56 |
| Copper | 8 |
| Native | 150 |
| Copper Cliff, arsenic plant | 18, 21, 170 |
| Copper-glance | 155 |
| Copper pyrites | 3, 6, 12, 31, 47, 151 |
| In Keewatin | 31 |
| Corundum | 1 |
| Cosala, Mexico | 166 |
| Courtis, W. M. | 150 |
| Cracks in Keewatin | 44 |
| Cross lake | 10, 26 |
| Analyses of rocks at | 64 |
| Basalt and diabase | 41, 64 |
| Iron formation near | 31 |
| South of Temagami | 67 |
| Cross mine, cobalt bloom at | 157 |
| Crown Reserve mine | Fig. 3, 77 |
| Crystals | 1, 4, 6, 9, 12 |
| Figures of | 12 |
| Currie claim | 124 |
| Customs works in 1642 | 195 |
| Danaite | 157 |
| Darby claims | 125, 126 |
| Darby lake | 122 |
| Dark red silver ore | 4 |
| Darragh claims | 126 |
| Dead Moose lake | 129 |
| Decorative materials | 1 |
| Deloro refining plant | 22, 169 |
| Mispickel mine | 170 |
| De Lury, J. S., on Montreal river area | 138 |
| Analysis by | 9 |

| | PAGE. | | PAGE. |
|---|--------------------|--|-----------------------|
| Depth of veins | 27 | Elk city | 121 |
| Of shafts | 43 | Elk lake | 118 |
| Desert conditions | 57 | Ores of | 67 |
| Deserted lake | 120 | Ellipsoidal structure | 120 |
| Denver, ore shipped to | 23 | Emily lake | 127 |
| Deposition of ores | 33 | Emmons silver mine | 155 |
| Devil's rock | 43, 59 | England, ore shipped to | 22 |
| Diabase | 38, 41, 43, 49 | Enstatite | 163 |
| At Evans mine | 63 | Epidote | 49, 52 |
| At La Rose mine | 28, 59 | Erie Cobalt mine | 86 |
| Dike | 28 | Erosion of Keewatin and Lauren- tian | 42 |
| Eruption of | 42 | Erythrite | 156 |
| In Bucke township | 39 | Erzgebirge | 159 |
| In Casey township | 132, 133 | Europe, cobalt ores of | 1, 157 |
| In Dymond township | 29 | Evans mine diabase | 63 |
| Keewatin | 42, 45, 49 | Evanturel township | 136 |
| Laccolite | 28 | Exhibit, permanent, of ore | 13 |
| Later | 64 | | |
| Magma | 33, 60 | Fahlbands | 162 |
| Microscopic description of | 60 | Farr's limestone quarry | 34 |
| Of Montreal river area | 30, 121 | Farr creek | 45 |
| Of Wendigo lake | 135 | Township | 124 |
| Post-Middle Huronian, described | 59 | Fault, horizontal | 27 |
| Quartz in | 44, 60 | Faulting | 38 |
| Silica in | 63 | In conglomerate | 58 |
| Veins in | 3, 25, 28, 29, 124 | Post-glacial | 38 |
| Diabase and Laurentian contact | 122 | Feldspar | 1 |
| And Keewatin contact | 32, 33 | Veinstone | 127 |
| And Huronian contact | 28, 29 | Fenwick-Ellis claim | 127 |
| Beneath Keewatin | 29 | Ferland, A. | 144 |
| Diabase mount laccolite | 28 | Ferro-magnesian minerals | 47 |
| Diabase point | 61, 64 | Fine point | 149 |
| Dike, aplite | 124 | Fissures and joints | 39 |
| Diabase | 28 | Origin of | 42 |
| Keewatin | 46, 48, 54 | Flow structure | 53 |
| Lamprophyre | 46, 55 | Flows, surface in Keewatin | 49 |
| Later granite | 65 | Folding in Keewatin | 44 |
| Of granite | 47 | Fluorite | 1, 155 |
| Olivine diabase | 124 | Foreign cobalt deposits | 157 |
| Porphyry | 42, 45 | Foster, A. | 142 |
| Diorite | 162 | Foster, C. A. | 142 |
| Keewatin | 49 | Foster mine | 86 |
| Dimensions of veins | 26 | France | 160 |
| Dip of beds near Cobalt | 38 | Fredericktown, Mo., cobalt plant. | 165 |
| Of rocks | 38, 59 | Freibergite | 4 |
| Discovery of cobalt deposits | 1 | | |
| Distribution of veins | 29, 35, 41, 67 | Gabbro | 44, 59 |
| Disturbance of veins | 33, 35 | Galbraith, R. | 144 |
| Dividends, Cobalt mines | 19 | Galena | 4, 135, 150, 155, 158 |
| Dolomite | 152 | Argentiferous | 65, 67 |
| Domeykite | 155 | At Cross lake | 67 |
| Dominion mine, cobalt bloom at | 157 | At Wright mine | 65 |
| Downey claims | 127 | Galt, Gerald | 135 |
| Drummond mine | 16, 86 | Gangue | 150, 151, 158 |
| Dunite | 163 | Gas, inflammable, in mines | 151, 155 |
| Dunlap, D. A. | 143 | Geikie's text-books | 39 |
| Dymond township | 29 | Geological Survey of Canada, re- ports of | 150, 156 |
| Dynamite island | 61 | Germany, cobalt deposits of | 157 |
| Dyscrasite, analysis of | 4, 6, 10 | Gibson, T. W., Letters to W. G. Miller re mineral discoveries ... | 3 |
| Eagle lake | 129 | Gifford's claims | 126 |
| Earle, E. P. | 144 | Gillies limit | 105 |
| Early history of Cobalt industry in Saxony | 189 | Station | 30 |
| Edison claim | 145 | Giroux lake | 26 |
| Egyptians, ancient | 164 | Giroux lake diabase | 60 |
| Elizabethtown | 165 | | |

| | PAGE. |
|---|---------------------|
| Glacial rocks | 41 |
| Glacial origin of conglomerate ... | 58 |
| Glacial striae | 124 |
| Faulting | 38 |
| Glaser, A., report by | 164 |
| Glendinning, Geo. | 145 |
| Glen lake | 35 |
| Gold | 1, 9, 151, 160, 165 |
| In Cobalt-silver ore | 9, 32 |
| In mispickel near Lake Temagami | 9 |
| In pyrites | 65 |
| Peculiar occurrence of, Rabbit lake | 30 |
| Traces of, in Port Arthur silver ore | 151 |
| <i>See also mispickel.</i> | |
| Goldschmidt, Prof. | 6 |
| Goodwin lake | 37, 43 |
| Gorman, R., & Co. | 15 |
| Government railway | 1 |
| Graham township | 157 |
| Granite, Laurentian | 42, 43, 120 |
| Granite boulders in Huronian | 47 |
| And Lower Huronian contact...47, 121 | |
| And Middle Huronian | 56 |
| Intrusions in Keewatin | 47 |
| Near Kirk lake | 47 |
| Of Montreal river area | 120 |
| Granite dike | 65 |
| Granite porphyry | 42 |
| Grassey lake | 129 |
| Grant Co., Oregon, cobalt ore in... 165 | |
| Graphite | 1, 4, 152, 155 |
| Gray copper ore | 12 |
| Graywacké | 42, 45 |
| Graywacké-slate | 56 |
| Columnar jointing in | 39 |
| Green-Mechan mine | 18, 29, 89 |
| Greenstone, Keewatin | 44, 49 |
| Ore associated with | 31, etc. |
| Recomposed | 45 |
| Greenstone and greywacké | 45 |
| Greenstones, fracturing of | 26 |
| Greenwater lake | 127 |
| Green lake | 129 |
| Grenville and Keewatin | 49 |
| Graywacké. <i>See</i> Graywacké. | |
| Guanacevi, Mexico | 166 |
| Gummite | 158 |
| Gunnison Co., Col., cobalt ore in... 166 | |
| Gypsum | 158 |
| Haileybury | 45 |
| Quarry at | 34 |
| Haileybury Silver Mining Co. | 147 |
| Hammer lake | 127 |
| Handy and Harmon, quotations by H. F. 23, etc. | 23 |
| Harbeck claim | 125 |
| Harris township | 127 |
| Described | 132 |
| Hartzburgite | 131 |
| Hastings unconformity | 163 |
| Heavy spar | 49 |
| Height of Land | 155 |
| Height of Land | 1 |
| Hematite in Keewatin | 31 |
| High Bluff lake | 129 |

| | PAGE. |
|--|-----------|
| Holden lake | 127 |
| Hore, R. E., on Casey and Harris townships, etc. | 131 |
| Hornblende | 45 |
| Hornstone | 157 |
| Hot springs | 3 |
| Hound Chute | 47 |
| Hubert lake | 124 |
| Hudson township, iron formation .. | 31 |
| Huntite | 152 |
| Hunt lake | 129 |
| Hunt, T. Sterry, early discoveries of nickel and cobalt by | 156 |
| Huronian formation, described .. | 12, 56 |
| Lower. <i>See</i> Lower Huronian. | |
| Contact of, with Keewatin.... | 46 |
| Barren in certain cases | 41 |
| Breccia | 48 |
| Character of pebbles in | 49 |
| Cobalt-silver veins in | 33, 40 |
| Contact of, with Middle Huronian | 43, 56 |
| Depth of | 27 |
| Distribution of | 29 |
| Intrusion of diabase in | 28, 29 |
| Metamorphism of | 41, 47 |
| Middle, described | 43, 56 |
| Area of | 56 |
| Contact of with diabase | 43 |
| Contact of with Lower Huronian | 56 |
| Quartzite | 43 |
| Thickness of | 27 |
| Occurrence of mispickel in | 30 |
| Of Montreal river | 120 |
| Hutchison, Wm., Dominion Exhibition Comr. | 13 |
| Hutton township iron range | 31 |
| Hypersthene | 64 |
| Imperial Cobalt mine | 20 |
| Diabase | 63 |
| Indian chute | 29 |
| Ingall, E. D., report by, on Port Arthur silver area | 150 |
| Ingram township, cobalt in ...30, 135-136 | |
| Described | 135-136 |
| Iron:— | |
| At Sharp's Landing | 46 |
| Chrome | 163 |
| Formation | 31, 46 |
| In greenstones of Keewatin formation | 31, 46 |
| In Keewatin | 31 |
| In mispickel near Lake Temagami | 9 |
| In silver-cobalt ore | 10 |
| Titaniferous | 31 |
| Iron pyrites | 4, 31, 65 |
| Iron range, buried | 31, 46 |
| In Hudson township | 31 |
| Iron ranges | 1, 31, 46 |
| Iturbide, Mexico | 166 |
| Jacobs silver-cobalt mine | 18 |
| Diabase at | 60 |
| Jalisco, Mexico | 166 |
| James, O. S., analyses by | 11 |

| | PAGE. | | PAGE. |
|--|-------------------|-------------------------------------|-----------------|
| James township | 36 | Argentite mine specimen | 54 |
| Described | 117 | Basalt | 51, 53 |
| Veins in diabase | 41 | Buffalo mine specimen | 51 |
| Jasper in Keewatin | 31 | Diabase | 50, 51 |
| Jasper magnetite bands | 48 | Dikes in | 54, 55 |
| Jaspilyte near Drummond mine... | 52 | Diorite | 50 |
| J B 1 silver-cobalt mine. <i>See</i> | | Drummond mine specimen | 51 |
| McKinley-Darragh mine. | | Flow structure | 53 |
| J B 6 silver-cobalt location. <i>See</i> | | Foster mine specimen | 51 |
| Coniagas mine. | | Giroux lake specimen | 51 |
| J B 7 silver-cobalt mine. <i>See</i> | | Kirk lake specimen | 53 |
| Trethewey mine. | | Lamprophyre | 54, 55 |
| Joachimsthal, mineral deposits of | | Near Coniagas mine | 50 |
| 4, 5, 157. | 159 | Near Trethewey | 50 |
| Production of | 159 | Nipissing mine specimen | 53 |
| Jointing of rocks | 39 | Nova Scotia mine specimen | 52 |
| Johnny lake | 37 | O'Brien mine specimen | 52, 53 |
| Joints, cobalt veins in | 39 | Peterson lake specimen | 52 |
| Johnston, R. A. A. | 4 | Provincial mine specimen | 51 |
| J S 14 silver-cobalt mine. <i>See</i> La | | Sasaginaga creek specimen | 50 |
| Rose mine. | | Silver Bar specimen | 51, 53 |
| Judge, P. O. | 133 | Silver Cross | 52 |
| Kaolin | 158 | Temiskaming mine specimen | 53 |
| Keeley mine | 147 | Trachytes | 53 |
| Keewatin formation | 42, etc. | University mine specimen | 51 |
| Andesite | 49 | Watt mine specimen | 52 |
| Basalt | 49, 51, 53 | Keweenaw | 43, 119 |
| Cobalt-silver ores in | 3, 32 | Kerr lake mine | 15, 89 |
| Contact of, with Laurentian | 42 | Kerr lake, Huronian of | 52 |
| Contact of, with Lower Huron- | | Diabase of | 60 |
| ian | 46 | Kerry lake | 124 |
| Decomposition of | 49 | King Edward mine | 20, 91 |
| Diabase in | 41, 48 | Kinogami lake | 36 |
| Diorite | 50 | Kirkegaard, P., on arsenic refining | 32 |
| Iron ores in | 49 | Kirk lake | 37 |
| Lamprophyre | 55 | Contact | 47 |
| Old surface of | 2, 27, 28 | Kittson township | 117 |
| Ores of | 3, 31 | Knight, C. W. | 42, 49, 60, 147 |
| Porphyry | 42, 45 | On Montreal river area | 117 |
| Pseudo-conglomerate | 46 | Kongsberg | 162 |
| Pyroxenite | 49 | Laccolitic masses | 59 |
| Sedimentary material | 49 | Structure of diabase | 28 |
| Torsion cracks in | 44, 45 | Lady Evelyn lake | 67, 121 |
| Trachytes | 53 | Lake Superior silver deposits | 150 |
| Type specimens | 49 | Minerals of Port Arthur veins... | 155 |
| Variety of rocks in | 49 | Ores of other Lake Superior | |
| Veins in | 3, 26, 27, 28, 31 | mines | 155 |
| Volcanic rocks in | 49 | Port Arthur mines | 150 |
| Fragmental | 46 | Rabbit mountain group | 155 |
| Keewatin overlying diabase | 29 | Silver Islet mine | 152 |
| Keewatin and Huronian contact... | 44, 45 | Lake Temiskaming | 43 |
| Keewatin and Lower Huronian | 46 | Limestone on | 33 |
| Keewatin and Laurentian contact | 47 | Lake Wendigo area | 125 |
| Keewatin and Laurentian des- | | Lamprophyre at Nipissing mine... | 54, 55 |
| cribed | 42, 44 | Dikes of | 46, 158 |
| Keewatin compared with Tertiary | | Microscopic description | 55 |
| eruptives | 49 | Keewatin | 49 |
| Keewatin at Sasaginaga lake | 47 | La Rose, Fred | 140 |
| At Clear lake | 47 | La Rose silver-cobalt mine | 15, 93 |
| Of Montreal river area | 120 | Breccia at | 58 |
| Of Casey township | 134 | Character of ore from | 12, 13 |
| Of Harris township | 134 | Diabase at | 63 |
| Of south of Lorrain | 148, 149 | Exhibits of ore from | 13 |
| Keewatin dikes | 48, 54, 55 | Pyrargyrite at | 7 |
| Keewatin, microscopic descriptions | | Strike of vein | 26 |
| of:— | | Vein | 25 |
| Andesite | 51, 52 | Veins on first level | 26 |

| | PAGE. |
|--|----------|
| Later basalt | 41 |
| Latchford station | 36 |
| Laurentian system .....42, 47, 134, 161 | |
| Contact of, with Keewatin | 47 |
| Lower Huronian | 134 |
| Of Casey township | 134 |
| Of Montreal river area | 120 |
| Laurentian syenite | 134 |
| Granite | 42 |
| Lava flows in Keewatin | 49 |
| Lawson, Dr. A. C. ....40, 156 | |
| Lawson mine | 15 |
| Lead | 1, 8 |
| Ledoux, Dr. A. R., richness of Cobalt ores | 25 |
| Ledoux & Co., sampling by | 21 |
| Leeds county | 156 |
| Leonard, R. W. ....141 | |
| Le Roy Claim | 136 |
| Liege Exhibition, ores at | 13 |
| Light red silver ore | 4 |
| Limestone, Niagara of Temiskam- ing | 33 |
| Analysis of | 34 |
| Lime from | 33 |
| Lines of disturbance | 35 |
| Lines of weakness, regional | 38 |
| Linnæite | 158 |
| Little Dan mispickel mine | 9 |
| Little Niccolite lake | 127 |
| Little Nipissing mine | 99 |
| Little Silver cliff .....13, 15, 42 | |
| <i>Frontispiece.</i> | |
| Logan, Sir Wm. ....34, 35, 43 | |
| Long lake | 2 |
| Long Point lake | 129 |
| Longwell, A. ....141 | |
| Loon lake | 147 |
| Veins near | 30 |
| Lorrain, area south of.....36, 37, 67, 147 | |
| Lorrain granite .....42, 47, 54 | |
| Lost lake | 129 |
| Louisiana Purchase Exhibition, ex- hibit of ores at | 13 |
| Low grade ore | 17 |
| Lower Huronian system, described .....42, 48, 56 | |
| Contact with granite .....47, 134 | |
| Middle Huronian | 56 |
| Of Casey township | 133 |
| Of Montreal river | 118 |
| Origin of | 57 |
| Thickness of | 28 |
| <i>See Huronian, Lower.</i> | |
| Maefarlanite | 152, 155 |
| Madoc | 157 |
| Magma, diabase .....33, 60 | |
| As source of ore .....Preface, 3 | |
| Magmatic waters | 49 |
| Magnesia in calcite | 10 |
| Magnetite | 157 |
| In Keewatin | 31 |
| Malachite | 157 |
| Mallard lake | 135 |
| Manganese .....4, 163 | |

| | PAGE. |
|--|----------------------------------|
| Maple mountain | 117 |
| Rocks of | 121 |
| View from | 119 |
| Maps | 42 |
| Map of 1744 | 6 |
| Marble | 1 |
| Marcasite | 152 |
| Marion, Ky., cobalt and nickel at | 165 |
| Markets | 167 |
| Marmora station | 22 |
| Marter township | 136 |
| Martineau bay | 59 |
| Matawapiki | 67 |
| Mattawin iron range | 31 |
| Mattawa | 36 |
| McGregor township | 156 |
| McKim | 156 |
| McKellar's island silver mine | 154 |
| McKinley, J. H. ....141 | |
| McKinley and Darragh mine.....15, 96 | |
| McMartin, John | 143 |
| McMartin, D. ....143 | |
| Mendelssohn lake | 127 |
| Metallurgy of cobalt ores | 167 |
| Metamorphism of silver area | 41 |
| Mexico, cobalt deposits of | 166 |
| Michipicoten island .....150, 156 | |
| Iron range | 31 |
| Mickle township | 124 |
| Microscopic description of Kee- watin specimens | 50 |
| Micrographic intergrowth .....60, 122 | |
| Middleburg, Transvaal, cobalt de- posits | 165 |
| Middle Huronian system .....30, 31, 119 | |
| Described | 56 |
| Unconformity | 43 |
| Middle Huronian and Laurentian. | 48 |
| Millerite | 6, 156, 158 |
| Mine La Motte, Mo., cobalt at ... | 165 |
| Minerals, lists of .....5, 155, 158 | |
| Arsenic | 5 |
| Origin of silver-cobalt | 3, 26, 41, 59, 60, 125, 151, 165 |
| Relative age of .....10, 33, 158 | |
| Unique | 1 |
| Mineral water | 153 |
| Mine accidents | 68 |
| Mines, ore shipped from .....20, 116 | |
| Mines, working at Cobalt, des- cribed: | |
| Badger | 71 |
| Bailey | 71 |
| Beaver Consolidated | 71 |
| Big Pete | 77 |
| Buffalo mine | 68 |
| Casey Cobalt | 72 |
| City of Cobalt | 72 |
| Cobalt Contact | 82 |
| Cobalt lake | 82 |
| Cobalt Silver Queen | 82 |
| Cobalt townsite | 81 |
| Colonial | 84 |
| Columbus | 79 |
| Coniagas | 75 |
| Crown Reserve | 77 |
| Drummond | 86 |
| Erie Cobalt | 86 |

| | PAGE. | | PAGE. |
|--------------------------------------|---------------|---|------------------------|
| Foster | 86 | New Jersey, refining plants in..... | 21 |
| Green-Meehan | 89 | New Liskeard, clay at | 34 |
| Kerr lake | 89 | New Ontario mine. <i>See</i> Trethewey | |
| King Edward | 91 | mino. | |
| La Rose | 93 | New South Wales, cobalt deposits | |
| Little Nipissing | 99 | of | 165 |
| McKinley-Darragh | 96 | Niagara formation | 42 |
| Moose Horn mines | 126 | Rocks of | 44 |
| Nancy-Helen | 97 | Limestone of | 31, 33 |
| Nipissing | 99 | Nicolite | 4, 6, 10, 13, 155, 158 |
| Nova Scotia | 102 | In Cobalt hill ore | 10 |
| O'Brien | 102 | In Port Arthur silver mines..... | 155 |
| Peterson Iako | 105 | Specific gravity of | 11 |
| Provincial | 105 | Nicolite-silver ore, analysis of | 8 |
| Red Rock | 108 | Nicolite lake | 127 |
| Right of Way | 107 | Nickel, difference between Sudbury | |
| Rochester Cobalt | 108 | and Cobalt deposits of | 3, 163 |
| Rothschild | 109 | Nickel bloom | 4 |
| Savage | 110 | Nickel mines. <i>See</i> silver-cobalt mines. | |
| Silver Bar | 110 | Nickel ore | 8 |
| Silver Cliff | 109 | Analysis of | 8 |
| Silver Leaf | 109 | Associated with gold | 30 |
| Silver Queen | 82 | At Mine La Motte, Missouri..... | 165 |
| Standard Cobalt | 77 | Exhibits of | 13 |
| Temiscaming & H. B. | 111 | In deposits of Joachimsthal..... | 158 |
| Temiscamingue | 110 | In Lake Superior silver de- | |
| Temiskaming Cobalt | 115 | posits | 155 |
| Townsite | 84 | In ores of New Caledonia | 163 |
| Trethewey | 114 | In ores of Sudbury | 1, 3, 163 |
| University | 115 | Occurrences of, known in 1890.... | 156 |
| Victoria | 114 | Production of | 20, 116 |
| Violet | 115 | Value of | 15 |
| Watts | 91 | Nickeliferous pyrrhotite | 3, 163 |
| Wright | 115 | Nickel pyrites | 158 |
| Mirador mine, Mexico | 166 | Nicol, Prof. Wm. | 7, 11 |
| Mispickel | 4, 6, 32, 155 | Nipissing mine, described | 99 |
| Analyses of | 9 | Lamprophyre on | 54 |
| In Lake Superior silver deposits | 155 | Nipissing mining company | 3, 12, 15 |
| Mine at Deloro | 170 | Nerite, Sudbury | 60, 65, 163 |
| Near Lake Temagami | | Norway, cobalt deposits of | 162 |
| Mispickel mines: | | Notes on minerals | 6 |
| Big Dan | 32 | Nova Scotia mine, described | 109 |
| Little Dan | 32 | Rocks at | 3, 18, 29 |
| Molybdenite | 162, 165 | Veins at | 28 |
| Monopoly, cobalt | 184 | Nugget claim | 61 |
| Montreal river, ores of | 3, 36, 67 | Nuggets of silver | 13 |
| Keewatin | 47 | N.W.-S.E. water system | 36 |
| Area described | 117, 138 | Origin of | 38 |
| Moose or Quinze river | 43 | Obabika lake | 37 |
| Moose Horn mines | 126 | Old Bill lake | 127 |
| Morin lake | 125 | O'Brien mine | 16 |
| Mountain portage | 31 | Described | 102 |
| Mount McKay, section through ... | 40 | Diabase | 62 |
| Mud lake diabase | 63 | Octahedron of smaltite | 12 |
| Muggey concentrator | 97 | Olivine | 163 |
| Munroe claims | 127 | Olivine diabase | 44, 65, 124 |
| Murray claim in Casey | 131 | Ophitic texture | 45, 61 |
| Nancy-Helen mine | 97 | Ore buyers | 20 |
| Native silver | 4, etc. | Oregon, Grant Co., ores | 165 |
| Arsenic | 5 | Ore Reduction Co. | 105 |
| Bismuth | 4, 9, 12 | Ore shipments | 15, 116 |
| Elements | 4 | Ores, cobalt silver: | |
| Of Montreal river area | 124 | Analyses of | 15 |
| N.E.-S.W. water system | 37 | Distribution of | 30 |
| Origin of | 38 | In diabase | 29 |
| New Caledonia, cobalt deposits of... | 162 | In Huronian | 10 |
| Competition of, with Ontario... | 166 | In Keewatin | 31 |

| | PAGE. |
|--|--------------|
| Origin of. 3, 26, 41, 59, 60, 125, 151, 165 | 39 |
| Periods of deposition of | 18, 21 |
| Orford works | 18, 21 |
| Origin of cobalt-silver ores | 165 |
| <i>Preface.</i> 3, 26, 41, 59, 60, 125, 151, 165 | 38 |
| Origin of water systems | 117 |
| Other Temiskaming cobalt areas... | 36 |
| Ottawa river | 37 |
| Otter creek | 129 |
| Otter lake | 1 |
| Palladium, in Sudbury ore | 43 |
| Paradis bay | 139 |
| Paradis, Father | 26 |
| Parallel veins | 32 |
| Paris green | 136 |
| Parks, W. A. | 37 |
| Paulson's bay | 49 |
| Pebbles, kinds of, in Huronian..... | 124 |
| Pegmatite, diabase | 117 |
| Peneplain | 25 |
| Penn. Smelting Co. | 67, 135 |
| Pense township | 135 |
| Rocks of | 163 |
| Peridotite | 33 |
| Periods of deposition of ores..... | 23 |
| Perth Amboy plant | 3 |
| Peterson lake | 60, 62 |
| Diabase near | 46 |
| Lamprophyre dikes near | 105 |
| Peterson Lake mine | 159 |
| Phillips' "Ore Deposits," notes | 45 |
| from | 45, 47 |
| Pickeral lake | 154 |
| Keewatin | 164 |
| Pie island, ores of | 166 |
| Pigments, cobalt | 129 |
| Pihuamo, Mex., cobalt at | 5, 158, 198 |
| Piko lake | 16, 21, 32 |
| Pitcheblende | 168, 170 |
| Plants for cobalt-arsenic ore | 32 |
| Illustrations of | 42 |
| Plate glass, arsenic in | 1 |
| Platinum, in Sudbury ores | 149 |
| Pleistocene | 158 |
| Point Fine | 158 |
| Polybasite | 49 |
| Porcupine silver mine | 49 |
| Porphyries | 49 |
| Keewatin | 52, 53 |
| Porphyritic rocks | 55 |
| Porphyritic texture in lamprophyre | 158 |
| Porphyry | 65 |
| At Wright mine | 45, 149, 158 |
| Porphyry dikes | 18, 150 |
| Port Arthur silver mines | 40 |
| Diabase near | 28 |
| District of | 30 |
| Portage bay, veins near | 63 |
| Diabase | 129 |
| Portage lake | 165 |
| Port Macquarrie, N. S. W., cobalt | 38 |
| deposits near | 43, 59 |
| Post-Glacial faults | 7 |
| Post-Middle Huronian diabase | 42 |
| Pottery, cobalt in | 26 |
| Pre-Cambrian series | |
| Precipitation of ores | |

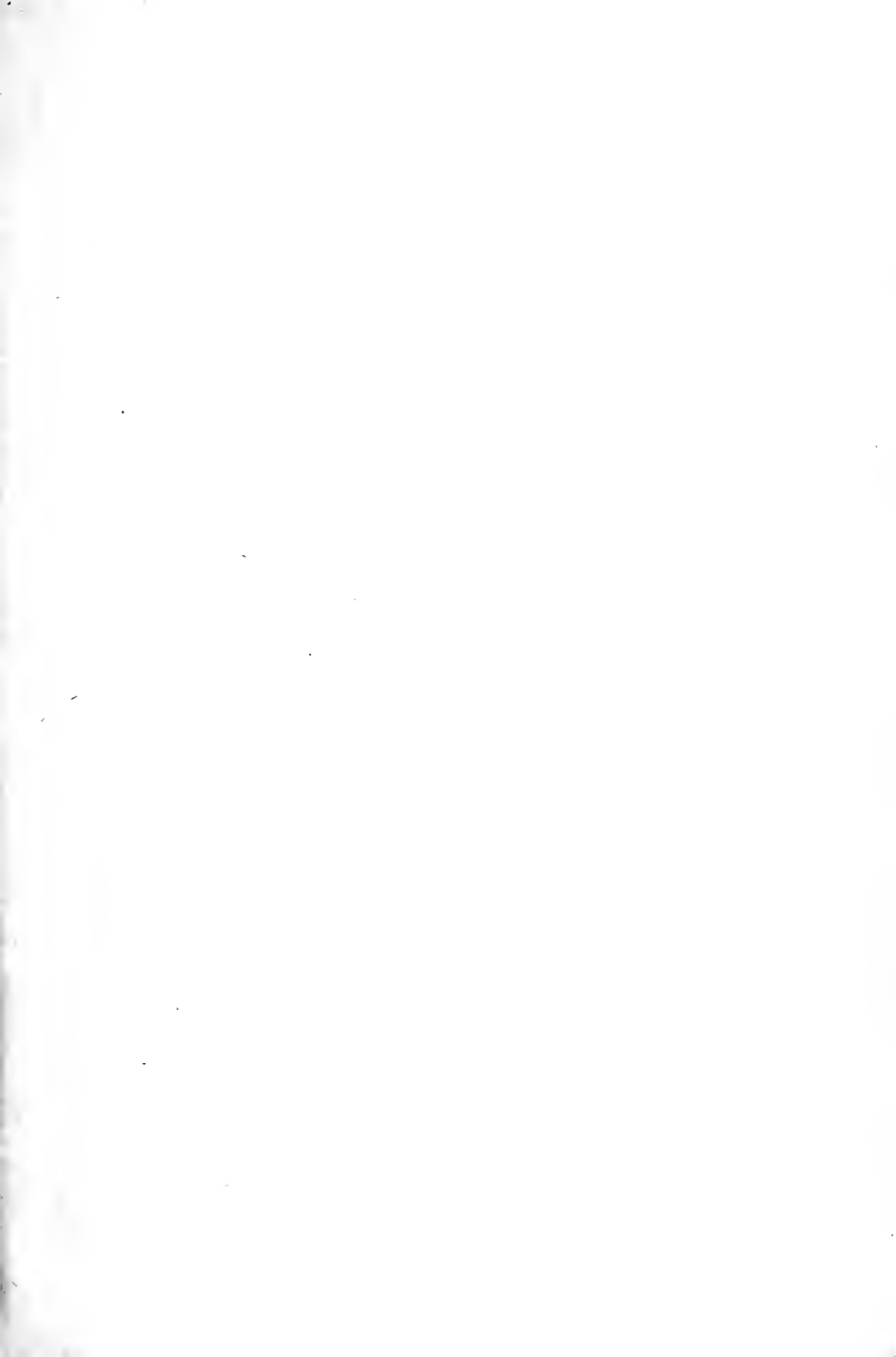
| | PAGE. |
|--------------------------------------|----------------------|
| Prefaces to 2nd and 3rd editions... | ix-xvi |
| Prices of cobalt, nickel, arsenic... | 13, 15 |
| Prices of silver, annual average ... | 24 |
| Prices paid for ores | 20 |
| Pottery | 164 |
| Princess mine | 20 |
| Prince's silver mine | 157 |
| Cobalt at | 157 |
| Production of ore | 15 |
| Productive areas | 41 |
| Character of | 41 |
| Proustite | 4, 5, 158 |
| Provincial mine | 105 |
| Prussia | 164 |
| Pseudo-conglomerate of Keewatin | 46, 48 |
| Pyrite at Tomagami | 32 |
| Pyrites | 1, 155, 158 |
| Pyrargyrite | 4, 6, 14, 158 |
| Crystals of | 7 |
| Pyroclastic material | 57, 58 |
| Pyroxene | 1, 163 |
| Analysis of | 54 |
| Pyroxenite, Keewatin | 49 |
| Pyrrhotite | 3, 151, 157 |
| Quartz diabase | 44, 60, 63 |
| Of Montreal river area | 122 |
| Quartz grains, rounded in granite | 47 |
| Quartz in Cobalt ore | 6, 12 |
| Quartz, primary | 44 |
| Quartzite | 143 |
| Huronian | 42, 43 |
| Maple mountain | 125 |
| Of Montreal river area | 118, 143 |
| Quartz porphyry | 158 |
| See porphyry. | |
| Quinze or Moose river | 43 |
| Rabbit lake | 30, 41, 67 |
| Analysis of ore from | 30 |
| Gold and cobalt ore on | 30 |
| Rabbit Mountain silver mines | 155 |
| Radium | 5 |
| Recomposed greenstone | 42 |
| Red Rock mine | 20, 29 |
| Refining Cobalt ores ... | 21, 22, 23, 167, 170 |
| Regional disturbances | 35 |
| Map of | 37 |
| Reverse fault | 38 |
| Rib lake | 37 |
| Richness of Cobalt ores | 25 |
| Rickard, T. A. | 160 |
| Rittengerite | 158 |
| Rhodochrosite | 152 |
| Rhombic dodecahedron | 12 |
| Right of Way mine | 18, 107 |
| R L 404 silver-cobalt mine | 10, 42 |
| Cobalt Hill vein | 10, 15 |
| Exhibits of ore from | 14 |
| See also Cobalt Hill and Little | |
| Silver mines. | |
| R L 403, diabase on | 63 |
| R L 405 | 149 |
| Rochester Cobalt mine | 108 |
| Rocks of cobalt-silver area | 42, etc. |
| Ages of | 47 |
| Breccia, analysis of | 58 |
| Cross lake rocks, analyses of | 64 |

| | PAGE. | | PAGE. |
|--|----------------------|--|------------------------|
| Diabase | 43, 59 | In Silver Islet mine | 152 |
| Gabbro | 59 | Near Port Arthur | 40 |
| Glacial. <i>See</i> Glacial. | | Relative age of | 10, 33, 153 |
| Huronian. <i>See</i> Huronian. | | Silver-cobalt mines. <i>See</i> mines. | |
| Keewatin. <i>See</i> Keewatin. | | In Keewatin | 32, etc. |
| Laurentian. <i>See</i> Laurentian. | | Silver Cross mine, jasper near ... | 52 |
| Niagara. <i>See</i> Niagara. | | Silver mines, Lake Superior. | |
| Slate, analysis of | 58 | Beaver | 155 |
| Rocks of Cobalt and Sudbury, com- | | Emmons | 155 |
| pared | 65, 163 | McKellar's island | 154 |
| Rogers, W. R., on Bloom lake | 129 | Porcupine | 155 |
| Rorke township | 117 | Prince's | 157 |
| Rosettes of cobalt bloom | 6 | Rabbit mountain group | 155 |
| Ross lake | 129 | Shuniah | 154 |
| Rothschild mines | 109 | Silver Islet | 152 |
| Russel, R. K. | 144 | Silver mountain group | 155 |
| Russel, W. B. | 144 | Spar Island | 154 |
| | | 3 A mine | 154 |
| St. Louis Exhibition, exhibit of | | Whitefish lake group | 155 |
| ores at | 13 | Woodsides | 155 |
| Sacking ore | 16 | Silver mining, 1902-6 | 18 |
| Sanderson lake | 129 | Silver ore: | |
| Sandy portage | 47 | Analyses of | 13, etc. |
| Saponite | 151 | Exhibit of | 13 |
| Sasaginaga lake, Keewatin at | 47 | In Annaberg deposits | 157 |
| Savage mine | 18, 110 | In Joachimsthal deposits | 157 |
| <i>See</i> McKinley-Darragh. | | In Port Arthur area | 150 |
| Saxony | 1, 157, 182 | Of Lake Superior deposits | 150 |
| Scapolite | 1 | Of Wright silver-lead mine | 65 |
| Schist, Keewatin | 49, 54 | On Lady Evelyn and Cross lakes | 67 |
| Schneeberg | 157 | Production of | 152 |
| Cobalt industry of | 182 | Source of | 161, 162 |
| Rare minerals at | 198 | Value of | 16, etc. |
| Silver and associated minerals at | 182 | Silver Queen mine | 4, 82 |
| Silver and cobalt mining | 182 | Situation and discovery | 1 |
| Silver cobalt mine at | 157 | Skeleton lake | 136 |
| Silver nuggets at | 182 | Skull lake | 127 |
| Stealing cobalt ore in 1603 | 185 | Skutterud, Norway, cobalt deposits | |
| Uranium at | 158, 198 | of | 162 |
| Secondary disturbance in veins ... | 33 | Skutterudite | 162 |
| Sediments in Keewatin | 49 | Slabs of silver | 14 |
| Serpentine | 163 | Slate: | |
| Shane-Darragh claims | 126 | Analysis of | 58 |
| Sharp's Landing | 41 | Contact of, with diabase | 39 |
| Iron formation at | 31 | Reddish banded | 56 |
| Keewatin near | 46 | Slate conglomerate | 49 |
| Sheets of diabase | 43, 59 | Smaltite | 4, 6, 12, 14, 158, 165 |
| Shields island | 130 | Analyses of | 11 |
| Shipments of silver-cobalt ore ... | 15, 116 | Anvil lake | 125 |
| 1908 | 116 | In Cobalt Hill vein | 6, 10 |
| Short lake | 47 | In Gunnison Co., Col. | 166 |
| Shuniah island silver mine | 154 | In McKim township | 156 |
| Siderite | 158 | On Trout lake | 145 |
| Sills, of diabase | 28, 40, 43, 59, 153 | Specific gravity of | 11 |
| Of Montreal river area | 122 | Smelters for Cobalt ores, 21, 22 | |
| Silurian limestone | 42 | 23, 167, 170 | |
| Series | 44 | Smithsonite | 166 |
| Silver area, metamorphism of | 41 | Smythe township | 120 |
| Silver, annual average price of ... | 24 | Snarum, Norway, cobalt at | 162 |
| Silver Bar mine | 110 | Sodalite | 1 |
| Silver Cliff mine | 109 | South African cobalt deposits ... | 125, 165 |
| Silver Islet mine | 152 | South Australian cobalt deposits ... | 163 |
| Silver lake | 124 | South of Lorrain | 36 |
| Silver Leaf mine | 20, 109 | Spain, cobalt in | 165 |
| Silver, origin of. <i>See</i> Origin | 60, etc. | Spar Island silver mine | 154 |
| Wire | 147 | Specific gravity of Cobalt minerals | 11 |
| Silver, native | 4, 6, 150, 158, etc. | Average of ore | 11 |
| In Lake Superior mines | 150 | | |

| | PAGE. |
|---|--------------------|
| Speight township | 121 |
| Sphalerite | 135 |
| Sphone | 1 |
| Spheroidal form of chloanthite ... | 6, 12 |
| Parting in Keewatin | 45 |
| Spring creek | 127 |
| Standard Cobalt mine | 77 |
| Statistics | 15, 164 |
| Stealing ore | 160, 185 |
| Stephanite | 158 |
| Sternbergite | 158 |
| Stibnite | 146, 160 |
| Stock-jobbing | <i>Preface</i> |
| Straight lake | 37 |
| Strike of veins | 25, 33, 38 |
| Parallel with dip of rocks | 38 |
| Stringers of quartz | 47, 51 |
| Stromeyerite | 4 |
| Sudbury nickel deposits | 163 |
| Difference from Cobalt deposits. | 3 |
| Igneous origin of | 3 |
| Sulph-antimonides, list of | 4 |
| Sulph-arsenides, list of | 4, 115, 158 |
| Sulphur | 5, etc. |
| Sutton's bay | 131 |
| Swansea, ore shipped to | 22 |
| Syenite in Casey | 132 |
| Laurentian | 134 |
| Sympathetic ink | 6 |
| Syncline, at Cobalt lake | 38 |
| Synclines in Huronian | 46 |
| Talc | 1 |
| Temagami Forest reserve, cobalt in | 117, 138 |
| Temagami iron range | 31 |
| Temagami lake | 31 |
| Temagami, mispickel near | 9 |
| Temiscamingue mine | 110 |
| See Temiskaming. | |
| Temiscaming and Hudson Bay mine .. | 115 |
| Temiskaming and Northern On- tario Railway | 1 |
| Temiskaming Cobalt mine..... | 9, 18, 29, 32, 115 |
| Temiskaming lake | 1, 27, 43 |
| Temiskaming mine | 3 |
| Temiskaming and Hudson Bay mine | 15 |
| Tetrahedrite | 4, 6, 12, 155, 158 |
| Analysis of | 8 |
| Thin sections of Keewatin | 42, 115 |
| Of diabase | 60 |
| Thorold refinery | 22 |
| 3 A silver mine | 154 |
| Thunder cape | 152 |
| Timmins, Dunlap & McMartin..... | 15 |
| Timmins, L. H. | 143 |
| Timmins, N. A. | 143 |
| Tin | 158 |
| Titaniferous ore | 31 |
| Tomstown | 37, 135 |
| Torsion cracks | 47, 120 |
| Townsite mine, Cobalt | 20, 84 |
| T. R. 173, etc. | 125 |
| Transvaal | 165 |
| Trap | 40, 155 |

| | PAGE. |
|---|------------------|
| Tres Puntas silver mines, Chili, co- balt at | 166 |
| Trethewey, W. G. | 14, 15, 141 |
| Trethewey and Leonard | 15 |
| Trethewey silver-cobalt mine | 13, 14, 25, 114 |
| Trethewey mine, Keewatin near.... | 50 |
| Strike of vein | 26 |
| Described | 114 |
| Ore from | 25 |
| Trout lake | 127, 139 |
| Creek | 139 |
| Troy, ruins of | 164 |
| Tudhope township, described | 117 |
| Keewatin in | 120 |
| Turner, N. L., analysis by | 54 |
| Twin lake | 129 |
| Type specimens of Keewatin | 49 |
| Unconformity | 43, 58, etc. |
| See Contact. | |
| Grenville-Hastings | 49 |
| Upper Huronian | 31, 43, etc. |
| United States, cobalt deposits of... .. | 165 |
| Refining plants | 23 |
| Smelting & Refining Co. | 23 |
| University mine, described | 115 |
| Diabase | 62 |
| Granite dike | 65 |
| Uraninite | 5, 158, 198 |
| Uranium ore in Joachimsthal de- posits | 158 |
| Uranochalchite | 158 |
| Uranochre | 158 |
| Values in veins | 33 |
| Value of cobalt-silver ore..... | 16, 20, etc. |
| Van Hise, on origin of cobalt-sil- ver ores | 3 |
| Van Nostrand township | 121 |
| Veins, cobalt-silver: | |
| Banding of | 6 |
| Character and strike of..... | 33, 38, etc. |
| Depth of | 27 |
| Dimensions of | 26 |
| Distribution of | 30 |
| Disturbance in | 33, 41 |
| In diabase | 3, 29, 124, etc. |
| In Huronian conglomerate..... | 3, 25, 33, etc. |
| In Keewatin | 3, 26, 49, etc. |
| Massive structure of | 6, 10 |
| Minerals of | 4 |
| Occupying joint cracks | 39 |
| Parallel | 25 |
| Passing from Huronian to Kee- watin | 33, 40 |
| Keewatin to diabase | 40 |
| Strike of | 25, 35, 39 |
| Veinstone | 6, 14, etc. |
| Vein system on La Rose | 26 |
| Vermilion district | 45 |
| Vermilion lake | 157 |
| Vertical section at Joachimsthal.. | 159 |
| Victoria Mining Co. | 15, 114 |
| Ville Marie | 65 |
| Arkose at | 48 |
| Violet mine | 16, 115 |

| | PAGE. | | PAGE. |
|---|--------|----------------------------------|-------------|
| Calcite from | 10 | Metamorphism of rocks | 41 |
| Diabase | 64 | Ores of | 67 |
| Volcanic breccia in Keewatin | 53 | West End Silver mine | 18 |
| Volcanic fragmental material in Keewatin | 46 | White arsenic: | |
| Volcanic rocks in Keewatin | 49 | Composition of | 32 |
| Volcanic waters | 3 | Price of | 32 |
| Von Cotta on Joachimsthal ores... | 158 | Uses of | 32 |
| Vugs | 6 | White bloom, analysis of | 7 |
| Wabi bay | 36 | White Bros. claim | 122, 125 |
| Wabi creek | 36 | Whitefish lake silver mine | 155 |
| Wacké | 159 | White Silver Mining Co. | 15, 20 |
| See greywacké. | | Whitson township | 42 |
| Waddell, Dr. J., analyses by | 11 | Whitewater lake | 146 |
| Wallace mine, nickel and cobalt at | 157 | Width of veins | 26, etc. |
| Water system, N.W.-S.E. | 36 | Willow Island lake | 128 |
| N.E.-S.W. | 35 | Witherite | 155 |
| Origin of | 38 | Wittichen, ores of | 158 |
| Waters as source of ore | 3 | Woodsides silver mine | 155 |
| Watts mine | 91 | Wright creek | 37 |
| Diabase | 63 | Wright, M. | 142 |
| Rocks at | 29 | Wright, N. C. | 142 |
| Watts and Allen | 15 | Wright silver-lead mine | 65 |
| Wells, J. Walter, on arsenic | 32 | Wright mine, Cobalt | 115 |
| Wendigo lake | 36, 37 | Working charges by smelters..... | 23 |
| Area described | 135 | Wyandotte smelting works | 150 |
| Diabase at | 28 | | |
| | | Zinc | 1, etc. |
| | | Zinc blende | 4, 151, 158 |
| | | Zircon | 1 |



101987

Gov.Doc. Ontario. Mines, Dept.of
Ont Annual report ... General index, vol.1-16
M (1891-1907).

NAME OF BORROWER

DATE

**University of Toronto
Library**

**DO NOT
REMOVE
THE
CARD
FROM
THIS
POCKET**

Acme Library Card Pocket
LOWE-MARTIN CO. LIMITED

